

# **SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL**

## **SNAPPER GROUPER ADVISORY PANEL**

### **Webinar**

**April 21-23, 2021**

### **Transcript**

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Jack Cox, Jr.  
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Attendees and invited participants attached.

The Snapper Grouper Advisory Panel of the South Atlantic Fishery Management Council convened via webinar on April 21, 2021 and was called to order by Mr. Jimmy Hull.

MR. HULL: Welcome, everyone, to the April 2021 edition of the Snapper Grouper AP meeting, and welcome to our new staff lead, Mike. As you've seen, we have a full agenda to go through and cover, and I ask that everyone give it their full attention and be concise in your comments, so that we can get through everything, and, as usual, the council staff has done an outstanding job preparing the agenda, and the council, of course, has asked for specific input from us on many of these topics, and so we definitely want to let them hear from us on the issues that they're specifically asking us for our input.

If it's okay, Mike, I would like to go ahead and ask the committee for approval of the agenda, and, if you all remember, if you do not approve, then you need to raise your hand, so that we can see if people don't approve, and then we'll count up from there, and, also, Mike, I don't have a view of raised hands yet, and so that would be an issue for me, but --

DR. SCHMIDTKE: Jimmy, can you see it on the webinar screen, or do you want me to share the document with you itself?

MR. HULL: I haven't seen anybody raise their hand, and I do see where you're asking for AP members to raise their hands, to test the audio, but I haven't been able to see any hands raised.

DR. SCHMIDTKE: Let me make a change to that setting. You should be able to see the raised hands in the attendees list.

MR. HULL: Okay. Let me go to that. I've got the attendees list, and let's see if I can see where there is a hand raised. Maybe. I mean, I see a column there that's right next to the microphone that might show a raised hand, but it doesn't look like a raised-hand icon, and so we'll see. It used to show up on the left-hand side of my screen. Right now, raised hands, red is raised, and I just see some names, and I see Cameron, Robert, and Chris under the left-hand side, and I do see names in that order, and so Cameron, Robert, Chris, and Andrew just raised his, and so I am seeing it.

DR. SCHMIDTKE: Okay. Great.

MR. HULL: Okay. Go ahead.

DR. SCHMIDTKE: Sorry, Jimmy, but just one more thing before we get too far into it, and I wanted to just show and talk through this screen right here of how to work the webinar, and it seems like a lot of people are fairly comfortable with this, but, just in case there's somebody on who is not, you should see, really, these three main buttons are probably the ones that you care most about.

The orange circle that you see here at the top of the screen, that top square, that's your microphone button. That will mute or unmute you. If it is orange and it has a line through the microphone, then you are muted. If it green, then you are unmuted, and we can all hear you. The second button is the raised-hands button. If it is red, then that means your hand is raised. If it is green, then that means your hand is down, and you would push that button in order to raise it. Finally, you see the text box down in the bottom portion there, and you can use that to type in a question or to -- If you

have any issues, and I'm sorry, but tech issue contact should have been updated, and it keeps on defaulting to Cameron, but, today, it is Christina Wiegand. That is all I have for kind of the how-to-work-the-webinar portion. If people have issues, please feel free to text them in that box. Jimmy, we can go back to the agenda then.

MR. HULL: Thank you for that. It was very helpful. I would also like to remind the AP members that, when you raise your hand, you will be recognized in the order in which you do raise your hand, and then, when we get to these motions for approval, they're going to be approved by consensus, and so, if you disapprove of something, you raise your hand, and then we'll take it from there, and so I would like to proceed with the approval of the agenda, and, if everyone approves of the agenda, don't raise your hand. If you don't, raise it.

I don't see any hands, and so, next, we would like to go to the Approval of the November 2020 AP Minutes, which we did get a copy of, and so does everyone approve of the last meeting's, November 2020, AP minutes? We don't see any hands, and so, at this time, I would like to go to the council's Snapper Grouper Committee Chair, Jessica McCawley, for some remarks.

MS. MCCAWLEY: Thank you, Jimmy. I have a short PowerPoint, and I'm going to go over a little bit of what we talked about at the last couple of council meetings. If you guys have questions, I can try to answer, or Mike, or Myra can help answer, and I just wanted to first start by thanking everybody for their time and effort on these meetings. I know that sometimes the webinar can actually be a little bit more challenging than having these meetings in person, and things sometimes take a little bit more time, but, on behalf of all the council members, we really appreciate your time commitment to this group and appreciate the discussions that you guys have. The council takes your input very seriously, and so I just want to thank you.

I should be here most of the time during the entire AP meeting. I will be in and out, as it is legislative session here at the State of Florida, and so I have some discussions occurring that I need to jump over to some other meetings, but, otherwise, I should be here the whole time.

The first thing that I wanted to highlight is, at the recent council meetings, the council received the yellowtail and the snowy grouper stock assessments, and the council began the process of making the fishery management plan changes based on the results of these two stock assessments. Also, the council used the feedback from the AP, and this was also based on feedback from the SSC, about directing staff on which species to look at for the need for conservation and management, and so just a reminder that these were those nine species that the SSC said to consider for removal from the fishery management plan, and you guys came back and said, hey, maybe some of these still need management and still need to stay in the FMP.

The council directed the staff to not include margate, yellowedge grouper, yellowfin grouper, silk snapper, and cubera snapper in the evaluation and the need for conservation and management, and so, basically, keeping them as managed species in the fishery management plan, and so that was based on some direction that you guys gave us at one of your meetings.

The council also continued work on the wreckfish amendment, which is Amendment 48, as well as the greater amberjack amendment, which is 49, and the red porgy amendment, which is Amendment 50.

The council also received the 2020 red snapper recreational landings, and, at this point, the council is awaiting guidance from NMFS on the possibility and potential timing of the 2021 season. The council is also anticipating some SSC guidance on SEDAR 73, to inform the discussions in response to that assessment, and the council plans to continue these discussions at their June meeting.

There was a special council meeting that was held in November to discuss a suite of topics pertaining to the management of recreational fisheries, and this group was exploring coordinated state and federal data collection, and particularly is there a way to do maybe a state permit, and this is something that I feel you guys have discussed at every single AP meeting for the past few years, and, ultimately, a workgroup was formed to continue these discussions, and it's anticipated that the workgroup will convene throughout the remainder of this calendar year and hopes to present recommendations to the council at its December meeting.

Then, lastly, the other thing that I wanted to highlight was the upcoming two-for-one permit discussion that was in response to the Trump Executive Order on removing barriers to fishing, and so it's anticipated that the council will take up this discussion at their September meeting. I know you guys have talked about the two-for-one permit requirement in the past. With that, that concludes the few things that I wanted to highlight. I can answer questions now, and I should be here, for the most part, for the remainder of your meeting, if you have additional questions, and so I'm going to turn it back to you, Jimmy.

MR. HULL: Jessica, thank you. Does anybody on the AP have some additional questions for Jessica? Raise your hand if you do. So far, I see no hands from the AP. I do have a question myself, Jessica. I was wondering the status of the commercial electronic logbook, if there's been any motion on that, and, also, on -- I know the pandemic and everything has, of course, delayed things, but there was some more information maybe available on the discard mortality of triggerfish, those two items.

MS. MCCAWLEY: That's a question. Either Mike or Myra will have to remind me, and the commercial logbook -- I am trying to picture our priority spreadsheet in my mind and where that was on the list. Mike or Myra, can you help me here?

MS. BROUWER: I do have an update for you on this. John Carmichael and I have been in contact with Monica from the NOAA General Counsel to get some guidance from her on what the council needs to do to officially implement the electronic reporting for the commercial sector, and it's looking like the council will have to do an amendment to make that a requirement, but we are currently in conversations with NMFS about this, and, as far as where it is in the workplan, I can't quite remember either, but it is something that -- It's on our radar, so to speak, and it's something that we're going to be working on in the coming months, and so I hope that helps somewhat. Thanks.

MR. HULL: Yes, that helps a lot. It's still in progress then, and it hasn't been axed, and that's good to know. Then I don't know, Jessica, if there was any more information about discard mortality of triggerfish, and that was it.

MS. MCCAWLEY: I can't remember where we ended up on that either, and that's a great question, Jimmy. Myra, do you recall?

MS. BROUWER: I do not, but I will try to find that out, and, if I find something out, I will let Jimmy or Mike know, and we can update the AP on that.

MR. HULL: Thank you, Myra. Thank you, Jessica. I do see a hand raised now from Chris Kimrey.

MR. KIMREY: A real quick question, as quick as we can make it, to save time, but I was just wondering what kind of feedback the South Atlantic is getting on the recreational reporting, like for myself, the charter boat reporting, since it was implemented. Is it positive or negative or no participation? What's happening with that, just as quick as you can answer the question.

MS. MCCAWLEY: I don't think I'm the best person to answer, but maybe one of the council staffers has a quick update on this.

DR. SCHMIDTKE: Jimmy, Cameron has her hand up. She should have some information.

MR. HULL: Thank you. Go ahead, Cameron.

MS. RHODES: Hi, Jimmy. Hi, everybody. I don't have too much to update you guys on that. The best folks to really add real clarification to these questions would be the folks at NOAA Fisheries, but, the last time that we got an update, a third of the fishermen in the South Atlantic were signed up and were actively reporting, and so there's still quite a bit of work underway to try to get more people onboard.

They're working through some issues and making sure that everybody is signed up and ready to go, so that they can also start participating, and so there's still quite a bit of work ahead, as far as I'm aware, but it does look like about a third of the permit holders are signed up and actively participating and submitting reports. I can try to answer any follow-up questions that might emerge, but it would probably be best to reach out to the folks at the Southeast For-Hire Electronic Reporting Program, and they can provide some more detail there. We're kind of hands-off with that program at this time.

MR. HULL: Perfect.

MR. KIMREY: Thank you very much.

MR. HULL: Thank you, Cameron. I don't see any other hands, and so I would like to move forward, and I believe, at this time, it would be appropriate to invite public comment from the general public, anyone other than anyone that is on the AP at this time, and so, if you would like to make public comment, please raise your hand, and we'll recognize you and unmute you. I know that we had one. Here we go. Paul Nelson, you are recognized.

MR. NELSON: Hello, everybody. Some of you know me, and some of you don't, but my name is Paul Nelson, and my family has been fishing in the South Atlantic since 1955. I represent my family, who are in the amberjack fishery, both recreationally and commercially, from Florida, in Ponce Inlet, and some of my fellow amberjack fishermen from North Carolina, and some to the south of me, and so I'm kind of speaking for some of those, also.

The reason for this letter is to address some of the concerns that many amberjack fishermen are currently facing. Our family has been in the amberjack fishery, and in the for-hire sector, since the beginning. Amberjack are caught using live bait and deep water between 150 and 500 foot of water. The live bait prevents most fish under twenty-four inches from being caught.

The commercial size limit of thirty-six inches to the fork causes many problems in this fishery, now that the shark populations have rebounded. Larger amberjacks fight on the hook a lot longer, and they are eaten by sharks, to the tune of 500 to 1,000 pounds per trip, up to \$2,500 lost per trip, in some cases a little less, because of price changes. Smaller fish, under thirty-six inches, can be harvested quickly, with fewer shark problems, but are then released and then being eaten by the sharks, and so our main problem is the sharks, is what I'm saying, but we're trying to get the most yield out of our fish.

Even if you remove the negative factors in the fishery that have been created by these arbitrary size limits, they do not make scientific sense, when you look at the entire biomass as a whole. According to SEDAR 59 in 2018, the stock lost 56 percent of age-one fish to natural mortality and 44 percent of age-two. These two age groups make up almost 75 percent of the whole biomass. In a given year, in 2018, for example, age-one through age-five fish made up over eighteen million pounds of amberjack up to thirty-nine inches total length and not fork length. The commercial size limit is thirty-six inches to the fork.

With natural mortality, that is over 7.5 million pounds of fish that could have been harvested, but were lost to natural mortality, M, in the survey. The current size, regarding optimum yield, is illegal, according to MSA. This stock is not being harvested at the ultimate optimum yield, due to the size limits that are based in the science.

Broken down by age class from SEDAR 59, Table 6, page 41 of the assessment, the report looks like this, and this is rounded numbers. The total biomass, and I can't -- I mean, it's almost eighteen million pounds is the total biomass, but it says that 7.6 million pounds is being lost to natural mortality, and it's saying like six million pounds of the biomass is a legal size that we can catch now, and the other is a short size of age-three or less.

On the top of this, now we're dealing with catch and gear loss, and we're at thousands of dollars per trip. These limits are also costing them precious time that they could be accessing other fisheries to make a living, instead of feeding sharks all day. We're spending more time on the grounds than we need to, causing lots of time on the water. Plus, it also takes us three days to catch our bait that we need to catch, and we have to take 300 baits now, instead of 150, like we used to, because we're throwing back so many fish and only catching a few of the bigger ones that we can keep.

According to MSA, conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry. There is clearly millions of pounds of amberjack that this stock could yield if the size limits were reduced or eliminated. With trip limits on this species, there is no need for any size limits. All the selectivity, due to the fishing methods, normally prevents us from capturing any fish under twenty-four inches. Therefore, the size limit is arbitrary, and it is not necessary, but it could be twenty-four inches total length.

That way, the largest part of the biomass with the highest mortality could be a part of the overall quota. This would make the stock healthier over the time, as more of the larger amberjacks would survive to spawn. Thank you for your consideration in this matter. That's it for me, and, if you have any questions about it --

MR. HULL: Well, Paul, thank you for that. We're going to be taking up the amendment on amberjack, and so this will definitely pertain to that, and I'm sure we'll all be able to dig into your comment, and you may have sent your comment in in written form too, and I'm not sure, but, if you did, we can find that on comments submitted and look at that information again, and so thank you very much, Paul. Is there anyone else? Raise your hand from the general public for public comment. I don't see any hands, and so, at this time, it looks like we are going to go to the first item on the agenda that is numbered, and it's going to be an update on recent regulations and status of amendments. Back to you, Mike.

DR. SCHMIDTKE: Thanks, Jimmy. I am pulling up, right now, Attachment 2 from your briefing book, and that's the update on ongoing amendments right now. The top thing that we have here is a bit of a highlight, Regulatory Amendment 34, which addresses special management zones in North and South Carolina. It was completed since the last meeting. The final rule was published on April 2, and regulations will become effective on May 3.

Scrolling down, there are several amendments that are going to be starting up related to allocations following recently-completed assessments. Red snapper is one of those, and the council is expected to receive the results of the SEDAR assessment in June. Yellowtail snapper, the council received those results in December, and we'll have a little bit of discussion on yellowtail snapper, concerning the fishery overview and kind of what amendments were put on hold and potential future actions, in this meeting. Snowy grouper is another recently-completed assessment, and an amendment was initiated to look at allocations, and that is beginning in the spring of 2021.

Then, coming of upcoming things, the golden tilefish SEDAR assessment and the gag grouper SEDAR assessment are both going to be presented to the council in June of 2021, and we are anticipating that there would be amendments addressing catch levels and allocations for those species as well, and that's all I have for that item, Jimmy, and I can take any questions, if there are any.

MR. HULL: Raise your hand if you have some questions for Mike. I do not see any hands raised, Mike. Thank you for that update, and, at this time, we'll move on to the next item, which is something that's very important for us, and it's a deliverable that we can give to the stock assessment process, and also to the council for management, and so the fishery performance report for mutton snapper. This is an important one, and it's going to take us some time to go through these questions, and Mike is going to lead us through it, and you will raise your hands and provide comment, and I will recognize you. Back to you, Mike.

DR. SCHMIDTKE: Thanks, Jimmy. First, I'm going to go through a bit of the information, just as a reminder and information for people who are not as familiar with these fishery performance reports. What these are, is these are used to get an idea of where the fishery is right now, using the AP's expertise and on-the-water and in-the-marketplace observations. These reports have the

advantages of engaging and using knowledge from fishery participants, as well as getting information that is not fully captured by the data.

The mutton snapper fishery performance report is happening ahead of a stock assessment that will begin later this year, and we're doing it with this timing to try to have some of that extra information that may explain some of the trends that we would see in the data, to have that readily accessible for the analysts.

As far as the process for going through this fishery performance report, today, I will first go through an online tool that shows the information that we have for mutton snapper, and this includes information from the last assessment as well as some more recent landings data. A link to this application was included in the meeting agenda. After discussing the data that's shown here in the tool, I will go through a series of discussion questions that the AP can respond to to help round out that preliminary information for the assessment team, and so, first, I'll go into that online tool overview.

You can see it there on the screen. This tool shows data on topics like species biology, landings, and economics, some of which is also split out not just for the whole fishery, but also by sector. Initially, I will move fairly quickly through these topics, but, as we get into the questions and discussion, if you want to see any pieces of this information again and have me pull it up on the screen, please let me know. That's something that we can do.

The last assessment included data through 2012, and so please keep that in mind when looking at some of the figures that are based on the assessment. We have landings data included here through 2018, and the first tab that we see here is the life history tab, and that shows information on growth and maturity from the last assessment, and these data showed a max age for mutton snapper estimated at forty years, and, if you scroll down, we can see female maturity of mutton snapper, and the females are maturing between ten and nineteen inches total length, with 100 percent maturity by about twenty inches total length.

Looking next at the index of abundance data that was used in the last assessment, these are a bit of a mixed bag of information, and so we have the Florida Fish and Wildlife FIM survey, as well as the headboat and the MRIP survey, and all of these are showing this declining trend going into the final year of the assessment, 2012, but, on the other hand, we have the logbook surveys, the longline and the hook-and-line, that are showing trends of increase going into that final area, and then kind of showing no real trend one way or the other. We have the NMFS reef visual census and the Riley's Hump reef survey that kind of bounces around and varies, but it doesn't go greatly in one direction or another towards the end of it.

Next, we'll look at landings. Annual landings have, overall, increased since the last assessment, which the last assessment would have included data in 2012, and so there's been some increase since there, and that was showing commercial, and here's the combined. We'll look initially at combined landings, and there's been an increase since the last -- Like I said, since the last assessment.

Scrolling down to the second figure, we see kind of the landings broken out by area and by sector, and the green that you see on the screen shows recreational landings from Florida through North



Carolina, and you can see those are really driving that trend of increase, following the assessment, and then kind of that dip that we see in 2017 and 2018.

Commercial landings from Florida are shown in pink, and commercial landings from other states are shown in a tiny, tiny sliver of blue that is at the bottom of that figure, but, from this information, again, you can see that the overall trend is largely dictated by the recreational landings. Looking specifically at the commercial sector, the commercial landings have held pretty steady overall, at about 80,000 pounds, with the bulk of that coming from Florida. Like I said, there was that tiny sliver that comes from the states further north, but most of this fishery is occurring in Florida.

Moving down to commercial releases, the data from the last assessment showed, going into the final assessment year, 2012, there was a decline in the commercial releases, and this kind of followed the earlier pieces of data of a decline coming from that 2000 range, where there were higher landings of mutton snapper and then a drop that happened in the mid-2000s, and it was held at kind of a lower level from then on. The most recent years had commercial releases at about 2,000 fish.

Next, looking at the recreational data, recreational catch has shown a pattern of increase and then a drop in the two most recent years of data included here. Recreational data by area had to be grouped across states, for confidentiality reasons, although, like the commercial, most of the catch is going to be coming from Florida.

Recreational releases generally show a similar trend to the landings. Noticeably, in 2017, we see kind of a break from that pattern, where the releases are very, very high, that second-highest point in that bottom graph, but, when you look at the landings, that was when that kind of initial drop from the peak in 2016 happened, and so we had a case of lower landings and higher releases that broke from those two patterns being complementary to each other. Then the releases continued up for an extra year when the landings dropped. Looking by wave at kind of the seasonal pattern, commercial landings, they mostly occur during Wave 3, in May and June, whereas recreational landings occur in Waves 3, 4, and a little bit in Wave 6.

Next, looking at the commercial economic values, the ex-vessel value and the ex-vessel price, they both have generally increased since 2010, although the value noticeably dipped in 2016 and 2017. We didn't see that dip in price, from that end, but we do see that dip further up in the value. Next, looking at economic impacts, commercial sales, income, and jobs all showed fairly similar trends, where there was higher levels in 2014 and 2015 and then a drop that occurred in 2016 and 2017, followed by an increase back pretty close to previous levels in 2018.

For the recreational sector, it was similar, in the sense that sales, income, and jobs all showed similar trends, but the recreational sector was different from the commercial, in that there was an increase that occurred from 2014 and 2015 and 2016 that were kind of sustained high years, but 2017 and 2018 were the years that experienced that steep decline, with 2018 being the lowest value that we have in the data available right now. That concludes the summary of the information contained in the tool for mutton snapper, and, before we move into discussion specifically in filling out the fishery performance report, are there any questions about this tool or the information in it?

MR. HULL: Does anybody have any questions? Raise your hand. I don't see any raised hands, but I do have one question, Mike. It seems that the recreational sector in the State of Florida, the

private recreational sector, or combination of charter and private recreational, did it show that they pretty much caught about 800,000 pounds of mutton last year, or somewhere about that, that huge number, and, if that's what I saw, that is calculated coming from the MRIP-FES survey? It just seems like really huge numbers, and where did those come from?

DR. SCHMIDTKE: We don't have the data from last year. The most recent year that we have is 2018. Chip, I would look to you to confirm this, but I believe that all of this information is from the MRIP-FES.

DR. COLLIER: That is correct. The units are in FES units, and so I'm checking on the 2020 value right now, and we'll get you an estimate of that shortly.

MR. HULL: Okay. Thank you for that. In your answer, Mike, that raises another question for me, and maybe others, and so, when you talk about -- You don't have to address this now, but maybe sometime during the meeting we can get into this, but the difference between an FES unit as compared to just the other, which would probably be the MRIP unit or whatever it is, but, sometime, I would like to have a quick explanation of that, and I do see a -- You don't have to answer my question now, but I would like to do it sometime, if you don't mind, and then I do see a hand raised from Robert Lorenz.

MR. LORENZ: Thank you, Jimmy. This question is just a quick one to Mike and Chip, who have a little more knowledge on this, but I'm thinking about something we were discussing about conservation-type measures with a fish like this, and I will focus on the recreational folks, but, with this species, mutton snapper, is -- I believe this is one of the species, and am I wrong, that a part of its early life cycle, when they're smaller, is in mangroves, which means probably not a lot of opportunity to save little guys, say north of latitude 28, and so parts of Florida and the rest of us in North Carolina, and am I wrong there? I believe this fish's life cycle includes an early part where there are considerable numbers inshore, which means any conservation measures, particularly on the recreational, might also need to be directed there, and could somebody answer that for me? Thank you.

DR. SCHMIDTKE: Thanks, Bob. I am fairly new to mutton snapper, and so I am still getting up to speed on the biology aspects of it, but, if there are other staff, or people who have worked on previous assessments, I would be open to hearing answers from them.

DR. COLLIER: I will be happy to field a couple of these questions. They are common in shallower waters as young, but they will move around quite a bit, and adults can be found in fairly shallow water, and so they are going to be moving around a lot, and, yes, it does need to be a coordinated effort between state management and federal management for this species, and I believe Myra, when this amendment was going through last time, worked closely with FWC, to make sure that everything had matched up.

As far as the FES units and MRIP, the FES units are -- It is the more statistically-valid numbers that we're using, and, if you are to try to estimate the numbers going back in time, that becomes more difficult, because they're not using the phone survey, as what was previously used. What they're using is the mail survey now, and so, even if people aren't happy with the FES numbers, it is going to be the FES survey that is being converted back to an older number, in order to estimate

those values, and so the FES would be less converted at that time, and it also is more statistically valid.

MR. HULL: Okay, Chip. Thank you for that. I see Myra has her hand up.

MS. BROUWER: Thank you, Jimmy. I just wanted to just throw out a few things that I am remembering that may help your discussion. Mutton snapper, the fishing levels were adjusted through Amendment 41 back in 2018, I believe. Prior to that, the recreational ACL was 768,857 pounds. When Amendment 41 went into place, the recreational ACL was specified in numbers of fish, and so that ACL went down to 127,115 fish.

It's really kind of hard to go back and compare these various catch levels, because the units have changed in recent years, and so I just wanted to remind you of that, and I am looking at the historical landings from mutton snapper from the NMFS website, and there were some years, like 2015 for example, that the landings were above 700,000 pounds, and so there has been some pretty high landings in the time series.

MR. HULL: Thank you for that, Myra. I appreciate it. Do we have any more questions before we move forward? Mike, I do not see any.

DR. SCHMIDTKE: Okay. Thanks, Jimmy. Next, we'll move into the fishery performance report questions. That is Attachment 3 in your briefing book. For the fishery performance reports, we have a group of kind of more or less standard questions, but then we also get input from stock assessment analysts or others knowledgeable of the specific fishery being looked at. The questions that are provided here have been reviewed by the lead analysts for the upcoming assessment, as well as Florida FWC staff that are knowledgeable about the mutton fishery, to try to tailor these questions to some of the anticipated assessment needs.

I will kind of point out, as we go through, if there are some of the questions that don't get hit that are things that the analysts specifically asked for, but we'll do our best to try to address these as much as we possibly can. There is kind of also a catch-all question at the end that asks for any issues that are not covered by the previous questions, and so, if there is something that you've seen in the mutton snapper fishery that is concerning to you, and you think it should be brought up and discussed in the assessment, then, when we get to that point, please bring that up.

To get information for the report, I will show and introduce each section of questions, and then I will pause for AP feedback on that section, and folks can raise their hands and provide your feedback and discussions, and, after we finish that section, then we'll move on to the next one, and so, for the first item that we're looking at, we're asking have there been substantial changes in the mutton snapper fishery? If so, when, and what do you think caused the change?

MR. HULL: Okay, AP members, raise your hand if you have some information to provide on that question. I see James Paskiewicz. You're up.

MR. PASKIEWICZ: Thanks, Jimmy. For me, primarily fishing on the south side, in the middle Keys area, ever since the new size implementation of eighteen inches, it seems, to me, that we're having a much higher recruitment in that sixteen to eighteen-inch size range. It seems like, throughout most of the winter, in depths from fifteen feet to forty feet, if you anchor or drift with

a chum bag out, the first fish you're likely to catch is an undersized mutton or nearly-keeper-sized mutton, and this seems to be almost everywhere up and down the reef, maybe a twenty-mile span that I fish regularly. For me, I like what I'm seeing with recruitment, and that would be a notable change from where we had been in the five years previous. Thank you.

MR. HULL: Thank you, James. That was good information. Is there someone else? David Moss, you're up.

MR. MOSS: Thank you, Mr. Chairman. I'm just going to echo what James had just said. Moving further north, throughout south Florida, we're seeing a lot of the smaller fish that we haven't seen as many of in the past, a lot of, quote, unquote, shorts that people are catching, from a recreational standpoint, which is a good thing, and we're seeing more and more of those.

MR. HULL: That's good news. Thank you for that. Is there anyone else that has some information to answer Question 1? Raise your hand, please. Okay. I see Vincent. You're up.

MR. BONURA: I would like to add that, in Broward County, Miami, all in the Keys and Key West, we're getting the bigger fish, and I think the recruitment is doing good too as well.

MR. HULL: Thank you, Vincent. Right now, I don't see any other hands, Mike.

DR. SCHMIDTKE: All right. Thanks, Jimmy, and thanks, everybody, for the responses. Next, we'll move into questions addressing fishing behavior and catch levels, and so this is kind of a group of questions, and you may have answers to all or a few, but just provide whatever feedback you're able to, but I will just read through the questions, and you all can think about your responses as I do that.

Have there been effort shifts to or from mutton snapper? Have there been considerable changes in the fishing techniques and/or gears used to target mutton snapper? Are there more or fewer vessels fishing for mutton snapper in both regions, both the South Atlantic and Gulf of Mexico, than there were ten years ago? This is trying to address kind of the numbers of dual permits. How much fishing for mutton snapper typically occurs during the day, versus at night? Has this changed?

Do you actively avoid fishing in certain areas to avoid catching undersized fish or highly-regulated fish, such as red snapper, to lessen bait loss? What do you see in terms of discards in the commercial sector or in the recreational sector? How often are mutton snapper discarded? What are some reasons they are discarded, and do you encounter mutton snapper as bycatch when fishing for other species?

MR. HULL: Very good, Mike. That's a lot of questions there for us on fishing behavior and catch levels. James Paskiewicz, you're up, sir.

MR. PASKIEWICZ: To the first point, has there been efforts shifts to or from mutton snapper, I would say that there has been a shift to fishing for mutton snapper, mainly because they are a fairly reliable rod bender. You don't really have to go all the way to main reef. Most of the shallow reefs, you're going to have immediate mutton snapper action. Whether they're going to be of legal

size or not is a toss-up, and, really, they are very good table fare, and so, to that point, I think that there's been a shift to fishing for mutton snappers.

The next point, as far as changes in techniques, I wouldn't think there had been much changes in techniques, other than flatlining in shallower areas, maybe targeting a couple of different species at the same time, but I think that's always been a fairly common practice in the Keys, where I mainly fish.

As far as more or fewer vessels fishing for mutton snapper in the South Atlantic and Gulf of Mexico, I mean, I think we would all agree that, with the rise in recreational vessels out on the water, that would go hand-in-hand with more pressure being put on these fish, and more people are going to be fishing for these fish, just because they're available and there's more boats out on the water.

Daytime versus nighttime for this species, it's a little bit harder to fish at night, and I think most people are a little bit uncomfortable, especially in the recreational sector, making night trips for snapper, most of the year. When we do have nice weather, that does change a little bit, but I would say, primarily, they are a daytime-produced fish. As far as avoiding certain areas because of size or species that can't be harvested, you can catch twenty-pound mutton snappers where you catch twelve-inch mutton snappers, and so, I mean, if you're targeting mutton snappers, I think anything is fair game, but, in the deeper water, I would imagine that you would definitely be selective in the areas that you fish.

In terms of discards, for me, in the commercial sector, I would say that's anything that's undersized swims away lightning fast, and they are a very hardy fish. I would be fishing mainly under a hundred feet of water, and they hold up fantastically when it comes to bringing them aboard the boat and back off, and do I encounter mutton snapper bycatch? Yes, when I'm fishing for yellowtail snapper, we do catch them right alongside, and so, for me, that's everything I have. Thank you.

MR. HULL: Thank you, James. That's very good information, and I do have two more hands raised, and so we'll go first to David Moss. Then, after David, it would be Andrew Fish. Go ahead, David.

MR. MOSS: Thank you, Mr. Chairman. Similar, in a lot of aspects, to what James just said, I don't know if there's necessarily effort shifts to mutton snapper, but definitely a lot more boats on the water and a lot more people trying to fish overall. Fishing techniques, yes, there's been some things that have changed, and there's a lot of people now that are doing like slow-pitch jigging and things like that that has kind of become the way this -- I don't know if we want to say craze or whatever, but it's a little bit of a technique shift, as opposed to just dead baiting or live baiting on the bottom.

Fewer or more vessels fishing, I think there's more vessels everywhere, South Atlantic or Gulf of Mexico, and it doesn't matter. Up by I would say Broward, Dade, and even Palm Beach County, there is quite a bit of night fishing that goes on for snapper, whether it's yellowtail or mutton. A lot of the guys, the recreational guys, up this way do more of that stuff at night, for any number of reasons. Yellowtail is a little bit better up here at night, I guess.

Do we avoid certain areas to avoid catching undersized fish? Not really, although I have heard, like over in the Tortugas, that some of the what used to be mutton snapper grounds, or spots, in the 180 to 220 range, have been taken over, in some areas, by red snapper, but that's just from talking to people, and I don't know how accurate that is. The avoiding undersized fish, no. As he said, you will catch -- In the same areas, you will catch the sixteen-inch fish with the twenty-two-inch fish. The commercial sector, obviously, I can't speak to.

Discards, there's a lot more discards now. Again, with the size changes, we're seeing a lot more of the smaller fish recruitment, and we do encounter them quite a bit when fishing for yellowtail, flatlining for yellowtails. You will get a lot of the mutton, a few of the smaller ones, but you'll get bigger ones mixed in there as well.

MR. HULL: Thank you for that. Andy, you're up.

MR. FISH: I'm out of Canaveral, and I just wanted to say that, mostly, we -- Actually, we don't really have a commercial -- Anybody targeting them, but the partyboats do seem to have been, over the last five or so years, catching more and more mutton snapper, kind of as a bycatch, but that's all I just really wanted to say.

MR. HULL: Right on. Thank you, Andy, and I would say, for myself and my boats, it's definitely a bycatch fishery. There's not enough of them there to target directly, and usually -- Well, in the last two years, my boats have landed 379 pounds while fishing for other species as a bycatch, and that's out of Ponce Inlet. Anyone else have some information on Item Number 2 on our mutton snapper fishery performance report? Raise your hand, please. I see no hands, Mike.

DR. SCHMIDTKE: Thank you. Next, we will move to the social and economic influences. For these questions, for the commercial sector, how has price and demand for mutton snapper changed? Is there increased demand for a specific size of mutton snapper, for example plate-sized? How has demand changed for charter and headboat trips targeting mutton snapper? Among the species that you target, how important are mutton snapper to your overall business, either charter or commercial? What communities are dependent on the mutton snapper fishery? Have changes in infrastructure, to docks, marinas, or fish houses, affected fishing opportunities for mutton snapper? How have fishermen and communities adapted to changes in the mutton snapper fishery?

MR. HULL: Okay. The first hand I see is James Paskiewicz. Fire away.

MR. PASKIEWICZ: Well, for the commercial sector, I would say that, since we don't typically catch mutton snapper in high volume, that getting them to the marketplace has been fairly easy. Turning a nice, solid profit on the mutton snapper has been very easy, and it's always a welcome addition to anybody's arsenal, as far as a restaurant, and it's a great fish to put on as a special.

I think that, because of the overall lower volume of fish, it's more spread out over the course of the whole year, and, when we could catch volume, we're restricted by the number of fish that we can harvest, and I think that, as far as moving the product, it's no problem, and it's always a welcomed addition to any menu.

As far as the demand for charter and headboat trips targeting mutton snapper and has it changed, I mean, they're a beautiful fish, and more and more people are wanting to get out on the water,

and they take great pictures. I would imagine that, among the charter and headboat fleet, it's exactly what you would want to target. That being said, I cannot attest to that myself, as far as knowing that more people are targeting them in that sector.

Among the species that I target, mutton snapper are -- I mean, they're fairly important, but it's not a large part of my overall landings, but, again, if you were to take a cross-section of what it means, it could turn into a vacation, and, if that was taken away, that type of money, it would have an impact, and so, I mean, it is fairly important. As far as the communities that depend on the mutton snapper fishery, as far as the Keys are concerned, up and down the Keys, I think it's a fairly important fishery for everybody who goes out on the water and shares this resource. I mean, up and down the Keys, I think it's a very important resource that we all share.

As far as changes in infrastructure and docks and marinas, overall, I would say that I don't think that it has changed much to affect the opportunity for mutton snapper. I think that we would kind of -- With effect to water quality issues, if we were having extreme water quality issues, because of new infrastructure, but I don't really see that being a factor, and I think that, in the Florida Bay, we see plenty of juvenile fish. Overall, the water quality has been okay, as from the standpoint where fish aren't -- We don't see fish dying, or we don't see areas that have no fish, and so that's always important.

I think that commercial fishermen, and recreational fishermen, have really taken the eighteen-inch size limit in stride, as far as adapting to a change in the mutton snapper fishery, and I think it's a general consensus that most everyone is seeing the upside to conservation when it comes to this specific species, and we are happy that we're seeing a rebound, an apparent rebound, because of it, and we would really like things like this to be more prevalent and really see where these management tools are really working, and I think that this is a good species that helps to demonstrate that, because it's a nearshore species and so many people go out and target this fish, and so that's my take on this section.

MR. HULL: Thank you, James. Vincent Bonura, you're up.

MR. BONURA: Thank you, Jimmy. I guess, after James went all through that, I would have to agree with everything James is saying there, and, to add to it, the price and demand here in Broward County and Lauderdale, Palm Beach, it's very good. It's gone up, and, because we can't catch enough of them, or we're not getting enough of them, they're easy to get rid of, and we can move them quickly, and I think that's about all I've got there.

MR. HULL: Thank you, Vincent. David Moss, you're up.

MR. MOSS: Thank you, Jimmy. From a recreational, and even a charter perspective, from speaking to a couple of people that I know, it's an interesting fish, in that it's more of a local demand, and so local customers for charters and local fishermen and stuff really love to target them, but it's not -- It's not like usually your typical guy that you're getting from up north somewhere doesn't come down necessarily to target muttons, but, as James just said, they're an absolutely beautiful fish, and people love to take pictures with them, and they're fun to catch, and it's certainly a challenge, and so I don't know that it has changed a whole lot.

Then, again, communities, are they dependent on them, again, from a charter, and even a recreational standpoint, they're not necessarily dependent on them, but it would definitely be a big hurt if we didn't have them, because of all the local people that do know about them and love to fish for them. The infrastructure, I mean, we're constantly losing dock space and whatnot, and that's an ongoing thing, and, as James said, the water quality issues in the estuaries is going to be an ongoing battle as well for a lot of these species, and not just the species themselves, but certainly the forage fish that they feed on.

MR. HULL: Thank you very much for that. Okay. I see another stakeholder online here. Cameron Sebastian, you're up.

MR. SEBASTIAN: My comment is just a general one. Like the gentleman just said, the infrastructure and loss of commercial docks for larger charter/headboats is ultimately going to be detrimental to the general fishing population and the inability to get economically-priced trips out, which would pretty much affect all the species along the North Carolina and South Carolina and Florida and Virginia area, and so, anytime that comes up, I'm going to always chime in, because that's going to be pretty much one of the limiting factors, and probably the ultimate demise to any of the headboat industries, as we move forward, unless companies are able to acquire their own docks, and then it's -- Unfortunately, our view in the future is relatively negative on the infrastructure and docking abilities for larger vessels as we move forward.

MR. HULL: Thank you for that, Cameron. Yes, the loss of working waterfront is definitely an issue everywhere. I see, James, you're up.

MR. PASKIEWICZ: To speak to what Cameron just said, you know, he's absolutely on-point there, and what we might should be looking at is maybe a way -- I mean, it seems that fishing is going to end up being a rich man's hobby, whereas, in the past, that really wasn't the case. Everybody had a pretty good opportunity, from your lower income and going and getting on a headboat for not a whole lot of money, and that is going away relatively quickly, and so how do we state this as a publicly-shared resource when we are really isolating so much of the population based on economic standards? What is it that we can do to help shift that? I mean, I don't have answers, but I'm right there with him when we're asking these questions, and this is a problem. Thank you.

MR. HULL: Thank you for that, James. Okay, AP. Do we have any more -- I don't see any more hands, Mike.

DR. SCHMIDTKE: All right. For the next section, we're going to be looking at management measures, and this only has two questions within it, but any comments on management measures are welcome. Are there new management measures that the council should consider, or are there existing management measures, such as size limits and trip limits and bag limits and seasons that should be changed? Are the current ACL and allocations appropriate for each sector?

MR. HULL: Okay, Mike. Management measures, guys. David Moss.

MR. MOSS: Thank you, Jimmy. I don't think it's as much in the way of new management measures that should happen, but I do think that, in a lot of ways, this fishery can speak to a little bit of a proactive approach. I know that, initially, when these regulations were changed, it wasn't



going through -- The mutttons weren't going through overfishing or being overfished, or listed that way, but it was just kind of that reality check of how much do we need kind of a thing, and can we do something to help the fishery before it nosedives, like we saw with hogfish and with the grouper and whatnot. I think that we're okay for now, but, again, I think that this is definitely been held up as kind of a poster-child of being proactive on some of these, and, obviously, it's not going to -- You can't just blanket it with everything, but it definitely worked here.

MR. HULL: James Paskiewicz, you're up.

MR. PASKIEWICZ: Thanks, Jimmy. Not to open a can of worms, and I did want to mention this closer to the end of the segment, and maybe Jessica McCawley can help out a little bit with this, but it seems that there -- Well, there have been complaints, made to me specifically, about commercial spiny lobster fishermen who set traps in the 150 to 180 foot live bottom, or near live bottom, and it seems that they are targeting mutton snapper as a bycatch, especially those fishermen who might hold South Atlantic permits in conjunction with all of their lobster permits.

I've gotten direct complaints that they are targeting fish in lobster traps, and I wasn't exactly sure which segment would be best to put that out there, but this seems to fit okay. Is there something that we can do to the design of a lobster trap that would help it catch less fish? I guess that might be something that we need to look at.

MR. HULL: Jessica.

MS. MCCAWLEY: Thanks, James. I actually hadn't heard about this, and so I would love to catch up with you, maybe outside of this meeting, and learn a little bit more about where this is happening and talk about it more, and I would also like to learn if you think it's just mutton or if it's other reef fish species as well, and is it on the Gulf side, or is it in -- I'm assuming it's in federal waters, but maybe it's in state waters as well, but, yes, I would love to talk about this more, and I hadn't heard this.

MR. HULL: James, go ahead and respond.

MR. PASKIEWICZ: Jessica, I had spoken at-length with Dave Dupree on this, and he since has been relocated and promoted to another area, and absolutely. I would love to have a discussion with you and kick it around, because it is something that we need to address, and it is in federal waters, and so, I mean, again, like David Moss was saying, we need to stay ahead of these things, and, if no one is speaking up, or people are afraid to speak up, it's our obligation to do that on this platform, as far as I'm concerned, and so I will definitely have that chat with you.

MR. HULL: Very good. Perfect. Robert Lorenz, you're up.

MR. LORENZ: Jimmy, thank you. Being from North Carolina, I just have one comment for the guys in Florida, to maybe pick this up or consider it, and we can connect Number 4 with Number 5 when we get into discussion of Number 5, but what I want to mention is the fact that, on a number of species, this could be one someday also, and there are a number of species, and it's been mentioned about inshore water conditions, particularly for fish that go through juvenile stages.

We are coming up with more and more fish, and not just this council, but other councils, that it's kind of -- It's not just explainable by what people are catching for the reasons the populations are going down. You have things like river herring, and now we have questions about gag grouper, and some of these things, many of these things, have an inshore part of their life cycle that is significant.

One of the things, when it comes to the council, is please strongly consider -- Always keep in mind, on certain species, the natural history of some of these fish, because we may get a species, from time to time, and this at some point could become one of them, where the problem isn't just catching a fish, but it is the water quality issues, and, as I'm listening to the Floridians speak about it -- I mean, up here, I know very well that water quality issues and the runoff from sugar fields and that area and the Everglades and that sort of thing, and so tying 4 with 5 I think is going to start to become even more important, because you are getting into some situations, on a number of species, and not just for this council, but we always keep going after the lower population of fish with lower limits on what people can catch, and that is not always going to be the answer.

MR. HULL: Okay. Robert, thank you for that. Good information. I don't see any other hands, Mike.

DR. SCHMIDTKE: All right. Then we'll move on down to the next section, and this is kind of a large one.

MR. HULL: Hold on. I do see one that popped up. I'm sorry, Mike. Vincent.

MR. BONURA: This is more of a question, I guess, maybe, but why during spawning -- During the spawning months, why is it per-person bag limit commercial, instead of a commercial poundage trip limit per vessel? That would be a question I have, and it may be looking to a poundage per vessel, instead of a per-person bag limit.

MR. HULL: Myra has the answer.

MS. BROUWER: I'm not sure I have the answer, Jimmy, but my recollection is we did discuss that, Vincent, during development of Amendment 41, and the regulation, before it was adjusted in 2018, was ten per person per trip for the commercial sector, and all we did was reduce that to five. I don't know the history of why that was put in place like that, way back then, but I think the council wanted to maintain some level of maybe stability, or consistency, I guess is a better word, for that regulation, but I can dig into that some more, and now I'm curious, and so I will go find out.

MR. HULL: Thanks, Myra. Jessica.

MS. MCCAWLEY: What Myra said is my recollection as well, and I would have to look at it a little bit more, but I remember Ben Hartig and other commercial guys on the council at the time, in 2018, were actually advocating for keeping it at a per-fish limit, as opposed to the poundage, and so I think that -- We definitely workshopped this and talked about it at length, but I would have to go back to my notes to look at the specifics of the discussions.

MR. HULL: Thanks, Jessica. I see, James, you're up.

MR. PASKIEWICZ: Yes, sir. I have to add that, as a commercial fisherman, I have never participated in a culling situation, to where I am discarding a smaller legal-sized fish and waiting to get five larger fish. Maybe Vincent might be able to give me a little bit of insight, if he's been doing something like that or knows anybody that is doing something like that. I mean, I don't know anybody that is commercially targeting mutton snappers to make a trip because of the -- During the spawning months, just because of the low numbers of fish that you can catch, and so I think that any five mutton snapper per person would be welcome.

Again, I kind of like at least that we're discussing this, because, lately, as a commercial fisherman in the Keys, we've been trying to find more and more ways to be efficient on the water, and a lot of boat owners, to get by, have been making solo trips. I know that I myself have this year, with yellowtail not being as easily harvested as they were in years past, and I find myself fishing alone a lot, and so a poundage -- A number of pounds per trip, per vessel, that might be attractive to me, and so, I mean, I'm glad we're talking about this. Thank you.

MR. HULL: Thank you, James. Jessica.

MS. MCCAWLEY: Thanks, Jimmy. The other thing I wanted to throw out here is, and I don't know if the fishery performance report is the right place to put it, but the FWC recently passed, and it's effect now, a spawning season closure at Western Dry Rocks, which is in state waters off of Key West, and that spawning season closure -- It affects multiple species, but one of those species is mutton snapper, and so this Western Dry Rocks area was a big part of the council discussions when those regs were passed before, when Myra was talking about the regs that went through in 2018, and the council had recommended that the FWC consider either a permanent closure or a spawning season closure at this site. FWC recently passed that, at the February commission meeting, and so I can give you more specifics about it. I don't know if you want to record it here in the management actions or how you want to handle what you want to do with that information.

MR. HULL: Well, I would leave that up to staff.

DR. SCHMIDTKE: I think we can make at least a note of it within the fishery performance report, and it's something that has happened in management that may be relevant as the data gets looked at in the assessment, and it doesn't hurt to have the information.

MR. HULL: Agreed. Yes, that makes really good sense, to have that information there under management measures, because certainly that's what it is, in a conservation way. I think that's important. Vincent, you're up.

MR. BONURA: I was just going to say that I don't think anyone is doing culling of the fish, like James asked. I never heard of anything like that happening, but I know there are boats that will take their entire family and have like eight or ten people on the boat, versus other guys who are actually commercial fishing, that have one or two people on the boat, and I think a commercial -- A poundage limit could even the playing field.

MR. HULL: Right on. Thank you. Myra.

MS. BROUWER: Thank you, Jimmy. I've gone back to look through what the council concluded for their choices in Amendment 41, and, basically, they did want to maintain compatibility with the proposed regulations for the recreational sector. The FWC, at the time, was also adopting that change in their regulations for mutton snapper in state waters, and so it looks like it was to just facilitate enforcement and to keep things compatible, and I will say, Vincent, that they did consider a poundage trip limit during those spawning months, but it was just felt that it was, like I said, to keep things more compatible with the recreational regulations, and they went to the per-person restrictions. Thanks.

MR. HULL: Go ahead and respond, Vincent. Thank you, Myra.

MR. BONURA: Thank you, Myra. I appreciate that. I was just going to add one more thing, and then I think that's about it. I was going to add that, as far as evening the playing field, I'm not saying to put a tiny -- A poundage limit of like twenty-five or fifty pounds, but maybe like a couple hundred pounds would be good.

MR. HULL: Sounds good, Vincent. Anyone else? Okay. Seeing no hands, it's back to you, Mike.

DR. SCHMIDTKE: All right. Next, we will move into the environmental, ecological, and habitat-oriented questions. There's a lot of material here, but, again, answer some, answer all, and whatever you're able to provide would be great. Do you perceive that the abundance of mutton snapper has changed over the past ten years? If so, how?

When and where are the fish available, and has this changed? For instance, has there been a shift in catch annually or seasonally inshore or offshore or north or south? Has the size of the fish that you typically encounter changed? Have you noticed any unique effects of environmental conditions on mutton snapper? What are your observations on the timing and length of the mutton snapper spawning season in your area? Have you observed pre-spawning aggregations of mutton snapper in spring and summer on the middle shelf? If so, have you noted, any changes in when or where such aggregations occur or with what frequency?

What do you see now, in terms of recruitment, and this is something that was kind of addressed a little bit previously, and where are the small fish? Are large and small fish found in the same locations or not? Have you observed changes in catch, depth, or apparent bottom type fished on? How have sea conditions affected fishable days? Have you noticed any change in the species caught with mutton snapper over the years or seasonally?

MR. HULL: Okay. AP members, environmental, ecological, and habitat. I see Chris. You're up.

MR. MILITELLO: As far as change in the past, I think there's -- More or less what I'm seeing out there, I think it's pretty much the same. We don't go out there to target them, but, if we do catch them, we're happy about it. Fish available, has that changed, I think it's the same time every year usually that we're fishing for them, and, like I said, they're not targeted, but we're happy to get them.

Size of the fish, I think, a few years back, they were a little bigger, and we're seeing the smaller ones now. Have you noticed any unique effects in the environmental conditions? No, not really.

Most of the fishing we do in the Palm Beach area is right around the inlet, and so, if we get a lot of rain, the runoff will push them away. Observations for timing and length of mutton snapper in the spawning season, I don't really have a comment on that.

Recruitment of small fish large, like I said before, it's pretty much been pretty constant, and we don't see any monsters here, but, when we do get one, we're happy to take them home and eat them. Sea conditions affect anything, no, not really. That's pretty much the same. If it's good one day, the next day might be blowing and we can't get out. That's it.

MR. HULL: Okay. That's very good. Let me ask you a question. I forgot to do an attendance and a brief what state you're from and sector. Chris, you said where you're at, and what state are you in, and what sector?

MR. MILITELLO: I'm in Florida, right in the middle of Palm Beach County, Martin, Palm Beach, Broward, mostly, is where I fish.

MR. HULL: Thank you for that. David, you're up.

MR. MOSS: As we've already spoken, and I have spoken to a couple of people, and myself, seeing more smaller fish than we've seen in the past, and a little bit deeper, whereas normally you would get the smaller fish on the patch reefs and whatnot, and so I know some people are seeing smaller fish out deeper, beyond a hundred feet, and whatnot, which I guess is good.

Any unique environmental conditions, again, water quality, and I haven't seen it adversely affect just yet, but I'm sure that's coming, as we have these estuary issues, as we just said, and Bob Lorenz was talking about, and we're going to see it affect a lot of things, and, again, not just these fish when they're juveniles, but the forage fish they prey on. I know, moving up the coast, off of Broward, Palm Beach, Martin County, so on and so forth, a lot of that seagrass estuary habitat is just gone, and the baitfish that we used to get out there, it's just not there anymore, and I'm going to assume that the fish are going to leave too eventually, fish being muttons, of course.

Weather, no. Last summer seemed to be really windy, but that's anecdotal, and I don't know if that's true or not, and maybe it was just bad timing on my part, and every time I could get out it was blowing. That's it. I mean, I still see them on the same type of bottom habitat and the same depth contours and all that stuff.

MR. HULL: Very good information. Thank you. Randy, you're up.

MR. MCKINLEY: Thank you, Jimmy. Just a quick note. I mean, I'm from the Topsail Beach area, North Carolina, and mutton snapper has never been something that we see much of. I will say, this past summer though, we took some trips, and, on the radio, people were actually catching some multiple fish in a day out there. They're all larger fish, but we did seem to see more than what we usually had.

Going down there, I've always got to mention the sea conditions. It seems like the weather up here in North Carolina is just getting windier and windier and less and less fishing days, and so it's just imperative that we are able to catch what we need in those fewer days that we get, and that's it, Jimmy.

MR. HULL: Thank you for that. James, you're up.

MR. PASKIEWICZ: I would like to reiterate a lot of what David said. Water quality issues are always a concern, and, along with the weather, the weather comments, at least for mutton snapper, after a good low pressure, maybe a tropical disturbance or a tropical depression, or even a strong cold front, but, when the water is really muddied up, it seems that the mutton snapper are the first back on the shallow hardbottom.

I mean, that's been pretty consistent throughout the years, as far as when it would be good to go catch the muttons in the shallow water, but, I mean, the Florida Bay water quality -- I mean, I think that we really can't ignore any of that, and we really need to be looking at that under a microscope and just make sure that we continue to do our best and try and keep it really viable. I also want to -- While we're on the environmental portion of this, I don't know if there would be anybody that could speak to what was happening with the contaminated water on the west coast of Florida and how that might affect Florida Bay and stuff like that. Thank you.

MR. HULL: Thank you, James. I do not see any. Maybe there is one coming now. Chris, you're up.

MR. MILITELLO: On the comment that James made about the weather, I will say that, in the last three years, when like a hurricane will be offshore or the pressure gets real low, these guys in Palm Beach Inlet and Lake Worth Inlet, they're getting muttons right off the pier, consistently, when it gets nasty like that, in the last few years. I just wanted to add that that was a good comment that James had.

MR. HULL: Thank you for that. That's interesting.

MR. MILITELLO: You're welcome.

MR. HULL: Okay. Mike, I don't see any more hands at this time.

DR. SCHMIDTKE: Okay. Jimmy, just before we move completely off of this section, one of these questions was put in specifically by the analysts, and we haven't touched on it quite yet, and so I just want to ask one more time, to see if people have information. The question concerning spawning aggregations of mutton snapper in the spring and summertime on the middle shelf, has anybody observed that or observed any potential changes to that behavior?

MR. HULL: Okay, guys in the heart of the mutton snapper fishery, have you observed any pre-spawning aggregations of mutton snapper in spring and summer on the middle shelf, 120 feet deep or greater, and, if so, have you noted any changes in when or where such aggregations occur or with what frequency? I've got James. You're up.

MR. PASKIEWICZ: I wish that I could answer that specifically, but I'm going to ride alongside of it, because I don't necessarily fish anything over a hundred feet, but what I will tell you is that the fish come and go from the shallower reefs, and so they will be there for a couple of weeks straight, and they'll be actively eating, and we'll catch a mutton, or five muttons, every day for a couple of weeks, and, all of a sudden, they're gone for a little while, and, when they do decide to

feed, they're very, very aggressive, and so I don't know if the time of the month, the moon phase, has got them really charged up or if it's water temperature or clarity or what it is, but the behavior that we see when they're in the shallower waters -- I mean, it's almost like a spawning behavior.

Every once in a while, we'll see the males milking in months that they shouldn't be, and so, I mean, I don't know if it's a pre-spawn situation. Unfortunately, I don't gut any of my fish, and I haven't for a number of years, and so I don't get inside and can tell you what state the roe is in, but, I mean, the fish definitely come and go from the shallows, and I would imagine they go to that middle shelf, if they're not from thirty-five to a hundred feet, and so, I mean, I think that there are aggregations of fish definitely that might be in a spawning behavior outside of the typically normal spawning months.

MR. HULL: Good information. Thank you, James. Anyone else on the AP want to respond to this specific question from the analysts, the stock assessment analysts? I don't see any hands, Mike.

DR. SCHMIDTKE: All right. Thanks, Jimmy. Then we can move just to that final question. Is there anything else that's important for the council or for the assessment team to note about mutton snapper that has not already been covered?

MR. HULL: Vincent.

MR. BONURA: I was just going to add there that we catch them a lot during amberjack fishing and grouper fishing, between a hundred to like 300 or 350 feet of water even. That's about it. That's all I've got there.

MR. HULL: Thank you, Vincent. Anyone else?

DR. SCHMIDTKE: Vincent, is that a particular time of year?

MR. BONURA: Well, yes. That would be the springtime, when grouper opens on May 1 and amberjack fishing is in March and then May, June and July, and I guess AJs are closed in April.

DR. SCHMIDTKE: Okay. Thanks.

MR. HULL: Mike, I do not see any other hands raised at this time.

DR. SCHMIDTKE: All right. Then I think that can conclude this agenda item. We've got some good notes here that we can use to develop this report. Thanks, everybody, for your input.

MR. HULL: Thank you, all. That was really good, and it's obviously clear that part of the fishery is south Florida, and I don't know how everybody feels right now, and we're into this for a couple of hours. Do we need to take a real quick break? If somebody needs to take a quick break, raise your hand, and we could take a two or three minute break and go to the potty.

DR. SCHMIDTKE: Jimmy, why don't we take five, to 3:15? That way, we can transition, because Chip is going to be leading us through the snowy grouper overview.

MR. HULL: That's perfect timing then, and so we're going to take a quick break until 3:15, everybody. One thing, Mike -- Go ahead and take your break, AP, and then, Mike, I have a question for you.

DR. SCHMIDTKE: Sure.

MR. HULL: I forgot to take a roll call and a quick intro of what state and what sector the AP members are from that are in attendance, and I know that it would help me if I could do that quickly, and I can just roll through their name, and they can respond quickly, if that's okay, because, with this type of a meeting, you forget who you're talking to and where they're from, if you wouldn't mind when we come back, if I could do that, real quickly.

DR. SCHMIDTKE: Yes, and that would be great. I apologize, and I should have brought that up a little bit earlier, but, yes, we can do that when we get back from break.

MR. HULL: Thank you. See you all in a few minutes.

(Whereupon, a recess was taken.)

MR. HULL: It looks like everybody is pretty much back. AP, I would like to, real quickly, call out your name, and if you will please respond, as quickly as possible, and just say here and give your sector or what affiliation you have and your state, your port and your state. I will start with myself. I'm James Hull, and, obviously, I'm here. I'm a commercial fisherman from Ponce Inlet, Florida. Robert Lorenz. I will come back. Vincent Bonura.

MR. BONURA: I'm here as well, and I'm a commercial fisherman and wholesale dealer out of Florida.

MR. HULL: Richard Brame.

MR. BRAME: I'm a recreational fisherman from Wilmington, North Carolina.

MR. HULL: Randal Beardsley. Tony Constant. Jack Cox.

MR. COX: Commercial, Morehead City, North Carolina.

MR. HULL: Andrew Fish.

MR. FISH: I'm here, and I'm a commercial fisherman out of Cape Canaveral, Florida, and I summertime in North Carolina, in the Wilmington area.

MR. HULL: Robert Freeman.

MR. FREEMAN: Recreational, Atlantic Beach, North Carolina.

MR. HULL: Richard Gomez. Lawton Howard. Rusty Hudson.



MR. HUDSON: Rusty Hudson, Directed Sustainable Fisheries, consultant, mostly representing a lot of commercial and some for-hire and private recreational and other things for many years, and I have a background going back into the 1960s in all the same. Thank you.

MR. HULL: Deidra Jeffcoat. Chris Kimrey.

MR. KIMREY: Full-time charter guy, Morehead City, North Carolina, Atlantic Beach, part-time commercial fisherman.

MR. HULL: Andrew Mahoney.

MR. MAHONEY: Bluffton, South Carolina, commercial fisherman.

MR. HULL: Randy McKinley.

MR. MCKINLEY: Commercial fisherman and federal dealer from Topsail Beach, North Carolina.

MR. HULL: Chris Militello.

MR. MILITELLO: Recreational fisherman, West Palm Beach area.

MR. HULL: Harry Morales. David Moss.

MR. MOSS: Recreational fisherman, south Florida.

MR. HULL: Red Munden. James Paskiewicz.

MR. PASKIEWICZ: Multigenerational commercial fisherman, wholesale dealer, Middle Keys, Florida.

MR. HULL: Andy Piland. Cameron Sebastian.

MR. SEBASTIAN: Cameron Sebastian, Operations Manager, Little River Fishing Fleet, the Hurricane Fleet, running out of North and South Carolina, commercial vessel as well as shrimp boats and spearfishing.

MR. HULL: Dave Snyder.

MR. SNYDER: Restaurant owner and chef and part-time charter captain and full-time recreational fisherman.

MR. HULL: Dr. Todd Kellison.

DR. KELLISON: Good afternoon, everyone. Todd Kellison, and I'm with NOAA Fisheries Southeast Fisheries Science Center, based out of Beaufort, North Carolina, and I'm a non-voting member of the panel.

MR. HULL: Robert Lorenz. I know he's here. He's from North Carolina. Randy Beardsley. Okay. Thank you very much for that. I appreciate it, AP members. It looks like the next agenda item is we're going into a fishery overview for snowy grouper. Back to you, Mike.

DR. SCHMIDTKE: I think I'm actually, in this case, passing it over to Chip Collier. He's going to go through the snowy grouper overview.

DR. COLLIER: Thank you, Mike. The format of the fishery description is very similar to what you were seeing -- It's very similar to the fishery performance report tool that you guys were just looking through for the mutton snapper. However, this one is a little bit different, and so, for the mutton snapper, what we're trying to do is get some of your insights on what the current fishery - - What's been going on with that and any potential changes and try to think about how that could affect maybe a stock assessment or maybe management measures.

This one is more designed to look at what could happen or give an idea of the management measures that have been taking place in the past as well as how the fishery and different things have responded to it, and so, on the first page, the first thing you will notice is the information of when it was updated last. I did find a text error on this first page, and so I changed it from greater amberjack to snowy grouper, and so you can see I changed the date of the change to today.

The data is back from February of earlier this year, and most of this information is coming from the SEDAR stock assessments, and so we're pulling as much as we can from that, and then, for some of the landings data, we're trying to get some of the more recent landings data, and I'm starting to pull from some of the SERO and Southeast Fisheries Science Center SAFE data that they provide us.

Looking through all these graphs, there's over twenty graphs. I'm not going to go through all of that today, but I'm just going to give you some highlights of some of the information for snowy grouper, but, with twenty graphs, it's a ton of information, and so what we're trying to do is give the council members as much information as possible when they're making any management decisions, but we also want it to be a tool that anyone can use, and so the first thing that we start off with, after the welcome page, is we switch over to the history of management.

This goes in chronological order, and you'll see the effective date for management, or you'll see the document, whether it's the source document for the FMP or the type of amendment that it was or emergency action. You will see the effective date, and you will see the actual listing for the proposed and final rule, and then you'll see the major actions, to the right of that, and then, in the last column, it's going to be the affected species.

For many of these, you're going to see that they're all, but some are actually directed right at snowy grouper. I think it was page 5, and you can see here that Amendment 13C was directed at snowy grouper, and it had some relevant management measures in there, and so it's listed directly for snowy grouper. I'm not going to go through all the regulations, and those are there for you guys to review. If there's any regulations that you feel are missing, please let us know, and we will adjust this as needed.

The next tab is the graphs tab, and this has a lot of information in it, and so sometimes it can be a little bit slow and finicky. I have also had to switch servers for this, and so I'm kind of curious on

how well this does with a few people looking at it at once. One thing to notice is you have five different types of data that we have provided so far, and we are going to be adding some additional data, and this is not a final product yet. It's been recommended to add some maps, to look at changes over time, and so those are going to be added in there, as well as some socioeconomic data is going to be added into this as well.

Currently, we have five different pages that you can essentially land on. As you click on these buttons over here, you should see this fish right here change, and so it could take a little bit, but that's indicating that there is a change, and we're going to start off with the assessment data, and this is for snowy grouper, and, looking at the fishing mortality rate over time, the assessment goes from 1974 all the way up to 2018, and, for the most part, you're seeing it above this black line here, which is indicating that the fishing mortality rate was above the fishing mortality rate at sustainable yield.

A couple of things that I do want to point out is this low point is that 2011 closure, that deepwater closure that had occurred, and then you also have a very high point here in the following year, and that matches with a high recreational estimate in the snowy grouper fishery. The spawning stock biomass, this is our -- This dark line up here is the spawning stock biomass at MSY, and you can see that the population is way below that, and so it's not in great shape, and so the stock is overfished and overfishing, and that is displayed here in this graph as well, where it's color-coded. If it's in the red, that's indicating that it's negative, and that's indicating that it's overfished and overfishing. If it's in a yellow, it's either overfished and not overfishing or it's not overfished and overfishing is occurring. Then, if it was green, that is indicating that it is a sustainable harvest.

One thing that's been occurring for snowy grouper is, if you look from the late 1980s to the current time period, there's a general trend in decreasing recruitment, and we're seeing that in a couple of different grouper species, and so that's a definitely concerning trend that's going on for this species.

This is just a plot taking the biomass of adults in the population and then looking at the number of recruits that are coming out over time, and I'm not going to describe too much on that, and then the last thing that we have in this are the indices of abundance. These are coming directly from the stock assessment, and so they're not going to be updated with the most up-to-date information, but it is relative to what was used in the stock assessment.

MR. HULL: Chip, sorry to interrupt, but I could never find this document for an attachment, and where is this available to us, so we can look at it in the future? It wasn't in -- When I had my briefing book, it's not there.

DR. COLLIER: It's right here, under 3. If you click on that blue link there, that should take you right to it.

MR. HULL: All right. Thank you.

DR. COLLIER: Is that working for you, Jimmy?

MR. HULL: Well, I will get back to that. I never did try to click on that, and my -- I will get back to that, and I'm sure it will work for me.

DR. COLLIER: Okay. If anyone has any issues with this, please let me know. Like I said, this is one of the first times that we're using this new platform, and so there could be some hiccups with it, and I just -- I don't know how it's going to work. I'm hoping it's going to work well.

DR. SCHMIDTKE: Excuse me, Chip, but, depending on when you downloaded your agenda, the link may have changed, and so make sure that you have downloaded your agenda fairly recently, like within the last week, because, when we had to switch servers, the link had to change, and we've updated the link, but, if you downloaded the briefing book right when it was posted, a few weeks ago, then you may have been clicking on an old link. A download like right now would bring you to the new link.

MR. HULL: Thank you for that. That's what I did, and so I'm sure it will work, and so, if anybody else had done that, there's your answer. Thank you for that. I appreciate it.

DR. COLLIER: I apologize for that. I was doing some updates to the server, and, when I did that, I broke the server, and the IT people can't even figure out how bad I broke it.

MR. HULL: Thank you.

DR. COLLIER: All right, and so the next series of plots that we're going to just go through, real quickly, is a combined sector, and you can see that we switched from an adult snowy grouper to a juvenile snowy grouper, and some of the key indicators of a juvenile snowy grouper are going to be these white spots and that black saddle on it.

The first plot that I provide is the percent of the ACL that's harvested per year, and this is taken directly from the SERO website. One of the reasons that I am displaying it as a percentage -- It's being displayed as percentages right now, and the reason for this is because the recreational numbers are changing for many of our species, and what we were monitoring to was a different value than what is being estimated currently, and so what I wanted to use was the estimated value that was used for the management purposes, to see if it was exceeding its ACL for that year.

In gray, we have the commercial fishery, and, generally, that stays right around 100 percent. In some years, it might drop down to 50 percent, and it might go up to about 150 percent, and, in blue, we have the recreational, and you will see that this is much more spiky than the commercial, and one of the reasons for that is it is a data-limited species, and there's not many observations of snowy grouper in MRIP, and so it tends to be pretty spiky.

Although you're seeing these huge fluctuations in the recreational catch levels, they are only 5 percent of the allocation, and so this allocation is going to be on each of the plots for each of the species that is developed in these review tools, and the next thing we have here is annual landings by sector, and you can see, much like the allocation is showing you, much of it is the commercial fishery that's doing the harvesting. However, in 2012, there was this pretty big spike in the recreational landings, and it jumped up to right around -- I think it was right around 80,000 pounds.

The next plot is the seasonal landings, and the key takeaway from this is you're starting to see these gaps when the ACL for snowy grouper is being caught, and you can see that there's closures in those time periods, and there is no harvest.

The state landings, these are grouped, because Georgia tends to be confidential, and so we're grouping some of them, and then it is a pretty -- There is not all that many people that are fishing for snowy grouper, and so we grouped North Carolina and South Carolina together as well, and you can see the regional landings for this species.

Now I am going to switch over to the commercial data. This is the commercial landings for snowy grouper from 2000 to 2019. Typically, for most species, we would also provide a number of discards reported by the commercial fishery. However, for this species -- And that number would come out of the stock assessment, but, for snowy grouper, all landings are grouped together, landings and discards are grouped together, and so I did not have an estimate of discards for this fishery.

The next plot we have is landings by month, and this is very similar to the other graph that we had shown you, because it is driven by the commercial fishery. The landings for snowy grouper is driven by the commercial fishery, and, once again, you will note these blank spots when the seasonal closure, or when the ACL closure, was in place.

State landings are going to be about the exact same, and this is a slightly different graph than what we had provided before, and this is a size distribution of snowy grouper, going from 2000 all the way up to 2019, and what you will see is most snowy grouper are between fifteen inches, which is this very faint white line here, and thirty inches, which is this other faint white line here, and that stays pretty consistent through the time period, and, in general, the modal size is right around twenty inches, which is this brighter, or larger, white line.

Then we also have the pounds that are harvested per trip, and what this does is it breaks out a trip into different bins, and so let's say a trip had twenty-five pounds, and it would be in this group. If a trip had a hundred pounds, it would be in this group. Then what it does is it sums up the number of pounds that were harvested on that type of trip, and so, on trips that caught a hundred pounds, they totaled up for over 90,000 pounds of snowy grouper being caught, and we have this displayed for -- Basically, this little one that is right around zero is less than fifty pounds, and then it's rounded to the nearest hundred pounds, and so this is fifty to 150 pounds, and this one would be 150 to 250 pounds. There are a few stars on this one, which is indicating confidential data, and so we were limited on the information that we could provide.

The next graph below that actually looks at the number of trips, as opposed to the pounds that were presented earlier, and this is the number of trips that caught less than fifty pounds of snowy grouper, and this is the number of trips that caught a hundred pounds.

Going into the recreational data, as I had mentioned before, there was a big spike in 2012, and you're seeing that spike here in the recreational landings, in the number of fish. On this plot, we also have the number of releases, and it tends to be fairly low for snowy grouper. The discard mortality for snowy grouper, I believe, in the last assessment, was assumed to be around 100 percent.

You will see this spike in landings from that 2012 number, but, for the most part, it is usually fairly small, and we're not seeing a strong signal of the seasonality of snowy grouper landings. The location of landings, in the early time period, prior to 2010, you can see that a portion of it was

made up from the North Carolina/South Carolina area, but, since then, it has been primarily off of Florida and Georgia.

The size distribution is very sporadic. We used to get some pretty good size estimates for snowy grouper, but, as management ratcheted down, we're getting fewer and fewer samples, and you're seeing that showing up in the data, where we're not seeing too many snowy grouper, and then, similar to the commercial, we have the number of snowy grouper that are harvested per vessel, and this is going to be different than most species. Currently, the trip limit, or the regulation, for snowy grouper is one per vessel, and so that's why it's broken out as one per vessel here as well. Any questions on the recreational data? I am not seeing any. Here, we have some of the life history for snowy grouper. I see Chris has his hand raised.

MR. MILITELLO: Do you have any data on what depth you're getting these at?

DR. COLLIER: I do not have any data that I pulled together for this. I could potentially look into -- Maybe some of the headboat data might have depth reported with it, and there might be some information from MyFishCount as well.

MR. MILITELLO: The ones that we catch are usually deep, maybe even 600.

DR. COLLIER: Yes, it tends to be a very deepwater species.

MR. MILITELLO: Okay. I was just wondering if we had any data on that. Thank you.

DR. COLLIER: The first plot in the life history section is the length-at-age plot, and, for snowy grouper, you can see it as a very slow-growing species. It has been aged up to over sixty years old, and I have only plotted out the first twenty-five years, but you can see it really balancing out here at the last few years, where, between the last five years all the way up to -- From twenty to twenty-five years, they're only growing about maybe an inch or two over that time period, and so it's not a substantial change.

Many people, when they're thinking about a fish, they either think in length or weight, and so this is just a conversion, if somebody is trying to figure out what something means. If somebody had caught a thirty-inch fish, this plot is indicating that it's around a fifteen-pound fish. Then the proportion of females that are mature, and this is based on the most recent stock assessment, and this is used to -- It's generally trying to protect some of the females and making sure that they get a chance to spawn, and you see that most fish are mature by about thirty inches.

Then snowy grouper are a protogynous hermaphrodite, meaning that they start off as females and they will switch to males, and you can see this change, and it becomes a pretty rapid change as they get up to right around thirty inches, and a much higher proportion of them are becoming males.

MR. HULL: Chip, a question would be -- So, if they're sexually mature, the majority, at thirty inches, could you go up to the length-at-age and see old they would be?

DR. COLLIER: If we're looking at this fish, a thirty-inch fish -- If we correspond here at thirty inches, that's about -- On average, it would be about ten years old.

MR. HULL: That's pretty old to reach sexual maturity. Okay. Thank you.

DR. COLLIER: But you can also think about it on this line as well, and so thirty inches starts -- They could be a four-year-old, and then they could be up to sixty.

MR. HULL: So the uncertainty is great.

DR. COLLIER: Yes.

MR. HULL: Thank you. I do have a question, or a hand raised, a couple of them, or one. James.

MR. PASKIEWICZ: For this particular species, it's almost safe to say that the larger fish mate with the smaller fish. I mean, that's the dynamic that happens with sexual maturity. In any given congregation, the bigger fish would tend to be male, based on these charts here, and they would be having interactions with the smaller fish while they were still female?

DR. COLLIER: Let me go back to the first plot, or the first page, and so this is indicating a group of snowy grouper, and it's not uncommon for them, at least on wrecks, to be in these large aggregations like this, and a proportion of them will be female, and a proportion of them will be male. The larger ones tend to be male, but there's going to be overlap in that.

MR. PASKIEWICZ: Got it. Okay. I mean, this is very interesting text there, and I like that.

MR. HULL: Rusty.

MR. HUDSON: Thank you, Jimmy. Can you go back to the graph, Chip, please? At what point does the females, by age, who are sexually ripe -- Because we always know the females start out small and stay in the inshore areas, and there might be a couple of males there, and then you get further off, 300 foot to 600 foot, and it becomes, like you say, on the snowy wrecks, as we called them, predominantly males, and by size, and so there is a size orientation for these females from their switch from sexually mature as females to becoming sexually mature as males. I am just kind of wondering, and has that been isolated with some accuracy? Thank you.

DR. COLLIER: You mean this plot here, where it's proportion female by length, and so, if they're not a female, this is indicating that they're a male, and maybe I need to do a better plot of this, just looking at it, but is that what you're asking, Rusty?

MR. HUDSON: No. The switch may be varying over a few years and a certain amount of length, but they start out as females, and, at a certain point, that female becomes ripe to be able to be part of the breeding process and create the next step, and so that will go on for several years for them, and is it from like four years old to ten years old, and then maybe you have a little cross-section of male and female, and I see it in gag groupers, where our biggest gray, or gag, grouper female was like thirty-five pounds gutted, but then, when you get into black-bellies, they were males around that age, and then they would get up to forty-five or fifty-five pounds, and so I'm just saying that there's an age process for those females that are participating and the males that would move into that 440 to 330 foot of water, where they aggregate off of the Florida Atlantic coast. Thank you.

DR. COLLIER: Right, and so the females begin to mature at about twenty inches, or maybe a little bit smaller than that, and they become fully mature at thirty, and then, if you remember back down to the plot of where it's proportion males, they begin to become a higher proportion males at about thirty inches, but, as you indicated, this is an aggregating species, and so, a lot of times, when you have an aggregating species like that, there are going to be some of the individuals -- Some of the larger individuals will remain female, if there are sufficient males in the population.

MR. HUDSON: What's the earliest age that the female, whatever, the 50 percent level, being mature? Is it like three-years-old or two-years-old? You indicated a length, and what is the age of that small length that they become mature?

DR. COLLIER: This is showing the third dot in, and I do this based on ages from the SEDAR assessment, and so it's indicating that the youngest mature fish that is modeled there is about a three-year-old.

MR. HUDSON: That's good. Thank you.

MR. HULL: I don't see any more hands right now, Chip.

DR. COLLIER: Okay. If there's any other pieces of information that you guys think really need to be added into this, I will be happy to add it in. There's a couple of things that I would like to add in, personally. Besides the socioeconomic data that I've been talking about, and potentially having some of that mapped out, changes in catch location, whether it's commercial or recreational, as well as maybe putting some of this maturity stuff onto the length slides. When you're looking at the lengths, I will try to plot on there the maturity, and so you'll get an idea of what percent mature the fish are when they're being harvested. I was also thinking about, if I don't do the maturity, do the size limit, and, that way, you get an idea of where the catch is relative to the size limit.

MR. HULL: That would be helpful. I do see -- Rusty, go ahead.

MR. HUDSON: Based on my fishing experience with the large males and what few females there were offshore in those catches, backing up all the way to those smaller -- It would be nice to have a poundage in year-one, year-two, year-three, year-four, because your variance is going to be smaller, and just that poundage to go with the length, to go with the age, and all of that is very informative. Thank you, Chip.

DR. COLLIER: Rusty, if you want to look at the length-weight plot, every time you see a dot, that is another age, and that was provided in the table, and I generally start off at age-one for the SEDAR-assessed species, and so you can look along, and maybe what I can do is actually add a number to this, and, that way, you will be able to see their age, along with the length and weight.

MR. HUDSON: Is there some variance between those ages that's been noted in the stock assessment? I wasn't really a big participant in that last one.

DR. COLLIER: Do you mean the certainty of the age estimate that's being used or --



MR. HUDSON: Yes, for the age and the length and the weight, in combination, and there's usually a variance, a little bit, and I know we had that in red snapper, and that twelve-inch was a one-year, and that twenty-inch minimum size we used was a roughly three-and-a-half-year, and there's a variance that goes with some of that.

DR. COLLIER: Yes, and so this plot up here has that variance associated with it. I did a rough covariance plot with it, but what I can do is add the variance for all of these into it, but I just haven't had time to develop all of that information yet.

MR. HUDSON: So then I can see the weight variance as well as the length variance, because I kind of used to make a joke, when I would get a one-pound chocolate, and we called them a snowy, on that 225 foot, and we used to call it a choco-lite, but you could see those more medium-sized animals showing up in that 240 to 300 foot, on the rolldown, but I don't know if SEAMAP or NMFS, and Todd might know, has ever used all the numbers for that area, and it's north end of the expanded Oculina area, the 220 to 330, and there's a lot of open area, and it's almost a fifteen or twenty-mile stretch of bottom where you can see all those age classes, and so I don't know if they've ever done the work since we started this years ago.

DR. COLLIER: I'm not -- Well, I guess we could put the plots of some of the MARMAP samples and SEFIS samples up there, and I am not exactly certain what that would get us, but I could definitely look into that information for you, Rusty.

MR. HUDSON: Yes, and it's back to that limited longline, and some of that got reduced by no funding, in that area that I'm talking about off of St. Augustine and the Volusia County, Florida line, extended out that way, and it just does not -- The chevron traps -- I am not sure about the -- The same deal when we get to -- It needs to have a little bit of sampling, and we would be happy if we could get more sampling down that way.

DR. COLLIER: Right, and some of that information -- I am not certain if this is the right place to put all the sampling locations. This isn't intended to give all the assessment information, but one of the places that you could potentially look for pieces of the assessment are here, under the index of abundance, and I know you want to figure out exactly where they're doing all the sampling and everything like that, and I think that's just most appropriate to be in the stock assessment or in a report by SEFIS/SERFS.

MR. HUDSON: I agree on that, and not a problem there. Also, I had thought earlier, when I first saw your very first photograph pop up, it would be neat if you had some kind of linked reference to that particular animal, for your pictures. Thank you.

DR. COLLIER: I will have to get up with the photographers for that.

MR. HULL: Robert Lorenz.

MR. LORENZ: Hello, Chip. Just a question for you, because I'm wondering -- I'm a little unsure if you're looking for -- Just for clarity, you're doing all this work, and you're showing us these nice graphs and information on this snowy grouper, and, as you finish, can I ask what your main purpose on this? Like what is this nicely-done -- What is the next step? Where are we going with all of this?

DR. COLLIER: The way that staff are envisioning this being used is, a lot of times, when we're developing an amendment for the council, we don't provide them all of this landings information, whether it's catch per trip or the size distribution of the trip, the condition of the fishery, and that's not all provided in one concise location, and so what we're trying to do is provide the information, not only to council members, but also to advisory panel members, so they can look at this information and really think about, all right, how would a size limit really affect me, or how would a bag limit affect me, and maybe other areas, because it does impact people regionally, and it can hit them differently. We're just trying to put all of this information together, early in the process, so, as things are being developed, and things are going out to scoping, this tool is available for people to look at and consider.

MR. LORENZ: Thank you, Chip. I guess what I was thinking of, coming from here in southeast North Carolina, and, if Andy Piland was onboard, he may be able to speak further north, but, you know, south of Point Lookout, for those of us here -- If you want input from the 5 percent allocation for recreational fishermen, if you're looking here in extreme southeast North Carolina, for instance, I, in my eighteen years, know of no one in my circle of friends that fishes for snowy grouper.

There are a few guys, somewhat known, and you can probably find them on social media, and I wouldn't want to give the name out here publicly, but, privately, I could give you a name, so that you could call, like somebody that actually fishes for these things, and there is a group out near Ocean Isle, North Carolina that has been quite successful, over the years, fishing for these animals, and they go out quite far.

I mean, for us, it's like a seventy-mile run, and so I know, as James Paskiewicz said, fishing becoming a rich man's sport, I think, for those of us here, and that's why I don't know anybody, this is truly a fish for rich guys, or extremely hardy guys, because you're going to need a craft that can comfortably go thirty miles an hour on the day you want to go, if you're going to make a decent day of this, or you're going to stay and have the type of that goes overnight and fishes in the morning.

In this area, this is a very difficult fish to pursue, unless you have the resources and the boat to go fast, or the stamina to be out for a very long day, and so I'm not sure how many people you find, without specifically searching a few people, but, like I said, they have come up, and they seem to be very good and knowledgeable on this species. I just wanted to offer that.

MR. HULL: Thank you, Robert. Chip, are you at the end of your presentation?

DR. COLLIER: I was.

MR. HULL: Okay. Do we have any other questions for Chip? I don't see any right now, Chip, but, while you're on that assessment output, could you go down just a little bit, to that graph right here, and so fishing mortality, at the end of the assessment, the last one, it is above MSY slightly, and it was only below, the last few years, for one year there, and then it's pretty much been above, for five or six years, going back to 2011 or 2012, and so, I mean, it doesn't look good for us, looking at that. I mean, we're just not going to get much of a fishery out of that, and here you are with restrictions like we have, and it's a tough situation there, and that's all I wanted to say.

DR. COLLIER: Thank you.

MR. HULL: Any other questions for Chip? I don't see any, Chip. Thank you for that.

DR. COLLIER: Okay. I will switch it back to the agenda and hand it back to Mike, or did you want me to go over yellowtail as well?

DR. SCHMIDTKE: I guess, just to make sure everybody is kind of clear on where we are for snowy grouper, I showed it in the ongoing amendments document. Following the stock assessment, the council has initiated an amendment process, and we're very early in that process, and I don't think the -- I'm not even sure if the IPT has met for the first time yet, but, if the AP has any thoughts, given the fact that this assessment showed an overfished and overfishing status for snowy grouper, of areas where there could be potential changes to management measures -- Now won't be the only or last time, but, if there are any kind of initial thoughts on that, then that's something that we could hear right now, and that could be passed on to that IPT.

MR. HULL: Does anyone on the AP have any comments or thoughts or ideas or more questions? The only thing that I would ask, Chip, would be to easily see the current ACL before me for both sectors and the current management measures in place for both sectors, poundage for commercial and the personal limit for recreational, to remind me what I'm looking at here, would be helpful to provide maybe some comment on where I think, for industry, what we need to do, and it would be also looking into the assessment output, to see what is the CVs, basically, for -- We saw the huge variance on a couple of those graphs, and, I mean, with the lack of intercepts on the recreational, and the lack of fishing and intercepts on the commercial, how confident are we in this assessment?

I know that all of these things interest me in trying to come up with some reasonable suggestion to the council, and I'm sure the council has the same ideas. Like, what are we going to do here? I mean, how confident are we here, and where are we at now, and what can we do? We certainly don't want to shut these fisheries down, and you're not getting any samples now, and you won't get any then. That's all I wanted to say. Thank you. Any other AP have some input here? Raise your hand now.

MR. HADLEY: Jimmy, we have a series of hands up, but, for some reason, the raised-hands doc -- There we go. It just updated.

MR. HULL: Got it. Okay.

DR. COLLIER: Sorry. I was playing, in the background, with the app and trying to do a few things for you guys.

MR. HULL: Okay, and so there's some questions for you, Chip. David Moss.

MR. MOSS: Thank you, Jimmy. Not really a question, but more of a comment, and it kind of goes to what you were just saying, Jimmy. Looking at how -- It doesn't look so fantastic right now, the state of the fishery, and, with more and more -- Again, from the recreational standpoint, more and more people doing what we call deep-dropping down here, and hitting these fish, it's kind of a scary situation, and it's just the opposite of what Bob Lorenz was saying. Where they

have to run seventy miles, I mean, down here, we don't have to go half that far, or maybe a third that far, to get to this fishery. It's super accessible for us down here, and, again, with the advances in technology and everything, they're just going to continue to get hammered.

MR. HULL: Thank you for that. Good stuff. Chris, you're up.

MR. KIMREY: My comment is not really a question either, and it's very similar to what he just said. For us here in North Carolina, especially in Morehead City and north, to get to areas to catch snowy grouper, it's a fair ride, and it's going to be more of a fifty-mile ride, but, just like he said, the popularity of deep-dropping is increasing exponentially, with technology on electric reels and GPS trolling motors and bigger boats and faster motors.

In addition to that, we've got daytime swordfishing in the past few years that has exponentially increased in popularity here, and the fallback fishery, if you don't get your sword bite, or get him in the boat, is to deep-drop on your way back in, and so that's certainly going to increase the pressure on our deeper-water groupers, and snowy being one of the main ones that is targeted here.

I feel like -- Another thing, just like he said, or actually you said, Jimmy, is that I think a lot of the catches are not being reported, and they're being missed, and so, if the numbers we're gathering, with the small sample, are already grim, I think it's possible that it's more grim than that, and the popularity of fishing in those areas, and the accessibility, is increasing. For us, if we get a bluebird day, you don't have to have a big, huge, fast boat. I know guys that are taking single-engine, twenty-three-foot center consoles, and running out there daytime sword fishing. On their way back, they could certainly stop and fish for snowy groupers, and it's something that we need to try to get ahead of, if there's already a problem.

MR. HULL: Thank you for that good information, and, before I go with more, Chip, what is the recreational bag limit, trip limit, recreationally?

DR. COLLIER: It's one per vessel from June through September, and is that right, Mike Schmidtke?

DR. SCHMIDTKE: It's one per vessel, May through August for recreational, and, just while I have the mic, I will just run through the others, just so that people are working with that reference. It's one fish per vessel, May through August, for the recreational fishery, and the commercial season -- The commercial is year-round, but there is a split season in place, with a carryover from the first season to the second, and the trip limit for the commercial fishery is 200 pounds gutted weight.

MR. HULL: Right on. That's a good reminder of where we're at.

MS. BROUWER: Jimmy, if I could just add -- Also, the commercial ACL -- The council just apportioned it 70 percent to that first season and 30 percent to the second one, and that was just last year that that went into place.

MR. HULL: Thank you, Myra. I remember that now, and it's all coming back. For me, I think it begs the question, and some of the other guys in the recreational fishery kind of said that a lot of

people are attacking this, and, if your limit is one per vessel, I mean, it's got 100 percent dead discard rate, and something is -- This isn't good.

Who in the world would -- I mean, just to target that recreationally, and run all that distance up in the northern states, to catch one fish, that's not happening. They're either doing it and catching a lot more, or they're just doing it. Usually, you put down a multi-hook rig when you're doing that, at least a couple of hooks, and so, any time I ever snowy fished, if you catch one, you catch more, but, okay, that was all. Thank you for that. Andrew.

MR. FISH: I just wanted to comment on the more and more people in our area that are definitely going offshore and targeting the yellowedge grouper, which opens January 1, and those species are definitely in the same area as the snowy and getting a lot of bycatch, when they do interact with those fish, and it's just hard to put a number on how many recreational are really out there, and there's getting more and more in our area.

MR. HULL: Thank you, Andy. Jack Cox.

MR. COX: I was just going to say that I love these comments, and they're very good comments that everybody is saying, and I would just reiterate that we just don't have the intercepts. I really am concerned about what we've got coming out of the ocean that we're not getting in the stock assessment. Being a participant in the fishery since the 1980s, you don't have the secret spots that we used to have, and everybody has got the same ship, and they go to the same break, and the fishery gets prosecuted pretty hard, and I'm just concerned that we don't have the enforcement intercepts that we need to really figure out what's going on. Thank you.

MR. HULL: Thank you, Jack. Rusty.

MR. HUDSON: Jimmy, on a historical basis, referring back to our deepwater snowy grouper wreck fishing, some of that started in as shallow as 360 foot of water off of Volusia County, and then they worked their way north, and that was already thirty-some-five miles or more, just to get to that spot, or maybe forty. Then we could work our way on up north, and, as we found these things, all the way up through north Florida and Georgia and South Carolina, we would fish them, and sometimes we would bring stuff in in the Carolinas, and other times we would bring it back to Florida.

The point is that, at points when we first found like an individual wreck, and let's say the Atocha. Well, we wound up at 100,000 pounds off that one spot across several weeks, all big, fat, thirty-five or forty-five-pound gutted snowy groupers, but SEAMAP and NMFS and SEFIS, all the different methods that we have tried to get employed to go out there -- A short line won't work unless they're able to use a video plotter and X marks the spot and make sure that they're somehow motor fishing over the spot.

These are the little details that they're missing about where the males and the really big females are located, but you get in that 200 to 330 foot of water, and you're messing around in the nursery ground, and you may or may not be able to do something with the various short bottom longlines and chevron traps between North Carolina all the way down to let's say the Broward County/Bruce County line, but the Gulf Stream presents a huge problem for them, the west wall, down our way, and there's just not going to get the sampling done.

They've got big holes in their stuff, and, of course, we know that the estimate of the estimate of the stuff going on with the recreational winds up creating an unbelievable number, and we know it's just not true, except that these intercepts are mostly down -- Like the other comments, they're down in south Florida, where you don't have to go as far. Even off of Hatteras, you still have to go a fair ways to go and fish those types of bottom.

I just wanted to throw all that out there, because all that needs to be considered in the analysis, and I don't know if the stock assessment has grasped all of those details, but that's good. That means, the last ten or twenty years, we've got a whole bunch of fish growing on these places that nobody can sample. Thank you.

MR. HULL: Robert.

MR. LORENZ: Jimmy, thank you, and I just want to circle back just a little bit with my comment, but also Andrew Fish, and actually a thought you brought up, Jimmy, and that is that, at least here, or certainly extreme southeast North Carolina, and we're probably going to find the same thing in South Carolina, but here we are with something like snowy grouper, where the recreational fishermen do not have --

Unofficially, or unaccounted for, there may be a lot more of these animals killed than we may realize, and the challenge with snowy for the recreational folks in an area like this, for assessing what our impact would be on the fishery, is finding those few fishermen that have the money, as I said, the money or the stamina, to go for them, but, as you alluded to, with one fish, it's not just the snowy, but they're taking another grouper.

I do remember seeing, also, pictures, maybe on social media, but there are other deepwater fish, and they may be stopping in a number of spots on a very long trip, a two-day trip, where, in addition, somebody may be stopping somewhere on a type of bottom where they could pick up tilefish, and I know barrelfish are even talked about, and Andrew brought up that, further north from me, that they do swordfishing, and maybe that's going to start happening, and so this fish -- A good overview on catching it, chances are there is other species being nailed also that would be of concern, and there's going to be a real challenge to identify those fishermen, recreational fishermen, that can regularly go for these fish, but I think, if they are identified, you may learn some interesting things.

MR. HULL: Thank you, Robert. Well, you know, at the AP level, we have addressed these deepwater fisheries before, and we've come up with recommendations to the council for a stamp or a deepwater permit, some way to identify those fishermen and how many people, recreationally, are prosecuting this, and I know we've made those, and we can make those recommendations again, or some other type, and they're asking for recommendations on potential management measures.

As Chip said, apparently it's early in this process, and it looks like they're going to create an amendment to do this, and so we have time, but, I mean, we can make a recommendation right now of the basic, commonsense need of some type of accountability for -- I mean, if we're not going to get permits and things for the private recreational that prosecutes snapper grouper species overall, well, how about let's narrow it down to the deepwater snapper grouper species. Anyway,

that's just a thought, but you guys can make recommendations here. Someone can make a motion, and we can make a recommendation to the council on this measure right now. Robert Freeman, you're up, sir.

MR. FREEMAN: For, I don't know, about thirty-eight years, I ran charters and private recreational trips. From Beaufort Inlet, you're forty miles to hit sixty fathoms, and, from sixty fathoms on out, it's where you're going to find your snowy. The greater concentrations, naturally, are on the wrecks, but, as Jack pointed out, most of those are well known by lots of folks, and, today, going that far for one fish is not really practical, but you also catch the tilefish as well as some red porgy in those same general areas, a number of spots out there.

I provided a number of -- I think it's 130-something locations to the Marine Fisheries and said, hey, if you want to sample these things, here's where they are, and so, to continue the one-fish limit, it's going to keep lots of folks from driving that far just for those one snowy or one tilefish or whatever, but, like I said, there's other fish in that area, the trolling around the Big Rock and things like that, and so a lot more boats are fishing it than you realize, and the pressure is on the fish.

The lack of intercepts is keeping the Marine Fisheries from knowing what is actually out there and what is actually coming ashore. Anyway, that's kind of my two-cents worth, but it's not out of the question that people are booking charters. I sold my business, but there are still people booking charters for that, and the electric reels have gotten to be real popular, and so there's the emphasis on what is happening to the snowy. Thank you.

MR. HULL: Very good input, Robert. Thank you. James, you're up.

MR. PASKIEWICZ: Thanks, Jimmy. Going along with what you said, maybe, on a renewal application, having a survey question of do you intend to, quote, unquote, deep-drop, yes or no, maybe in waters over 300 feet, and, of those people who check that box yes, do a mandatory fish count, just like commercial fishermen, certain commercial fishermen, are selected to provide economic data for every trip that they take.

How about a sampling of recreational fishermen who say, yes, we're going to deep-drop, and then those particular recreational fishermen have to have trip tickets, or not trip tickets, but logbooks, so to speak, for every trip that they make that year and get some real, hard-core data, and have that be a random lottery-type system, just like it is for the commercial sector.

MR. HULL: Thank you for that, James. Rusty, you're up.

MR. HUDSON: 220 foot to 330 foot off of St. Augustine down to Port Canaveral, the rolldown and the steeples areas and stuff like that, we mostly have to just drift fish, where we get from the smaller snowy right on up to nice-sized snowy on the deeper edge of that 300 foot, but maybe it's because of the west wall of the Gulf Stream that we don't have to go as deep as I heard Robert talk about up in Carolina, but the reality is that I like what he had to say about the red porgy, and we get the blueline tiles and the snowy groupers, and, generally, it's more of the small to medium-sized, or maybe a large one every once in a while in our region, because that was the nursery grounds and the mixing grounds between what we call our inshore stuff, and I don't quite call that a deepwater area, and I would not want to call it just a deep-drop area.

I fished it when the west edge was a little further to the east, and I could just drift in that 240 foot, at a very slow rate, and catch very well, and so there's differences in our regions, and the sampling protocols, again back to stock assessments, but three years, five years, ten years, it takes a long time to get stuff fixed. Thank you.

MR. HULL: Thank you, Rusty. Jack, you're up.

MR. COX: Based on the comments that we've heard, I would make a recommendation to the council that we look at a recreational deepwater stamp, just to know the participants, because there's a lot of unknowns. I think, like everybody who has made comments, we all have this question of what do we really think is coming out of the ocean, and what are we taking, and how come this fishery is not rebuilding, and we really can't make recommendations on that until we know what the removals are.

Not that I think the council will do anything, because this is not the first time we've talked about this, and the council talked about it back when I was on it in 2013 and 2014, during our visioning process, but it certainly makes a lot of sense to me, and, if we don't do it for all of our deepwater species, let's at least recommend it for some of these fish that we're not seeing very good recruitment on, like the snowy and some of the tilefish. Thank you.

MR. HULL: Thank you, Jack. I like that idea. I think that I would like to make a recommendation, because that's what they're asking, if we would like to make recommendations on potential management measures, and so does someone want to -- Hold on. We'll come back to that. We'll let Vincent talk, and then let's see if we can come up and have consensus on a recommendation. Go ahead, Vincent.

MR. BONURA: Jimmy, I was just going to add, if Jack was going to put a motion in there, I would go ahead and back him up on that.

MR. HULL: Thank you. Chip.

DR. COLLIER: This one is going to be a little bit different than what you guys have done in the past. Think more theoretically, or ideas, more than concrete things. This is more -- It's very early in the process, and how should we begin to structure this idea, in order to get at what you guys would like to see, and the public potentially review in the future? This is not getting down to the actions and alternatives, and this is information for us to develop the actions and alternatives.

MR. HULL: Okay, and so, I mean, I don't think we would have to come up with anything concrete at this early stage, but I think the question, the basic question, is how do we get a handle on the ever-increasing recreational effort, and we would ask that be top consideration to the council for potential management to think about. Again, is some type of a permit or stamp or whatever you want to call it for deepwater species -- You wouldn't go by depth, and you would go by species, and we're talking snowy, golden tile, gray tile, things like that. James.

MR. PASKIEWICZ: Basically, I was going to say, like you're saying, what is it that we're being asked? I mean, do we just say, as a panel, that we would like the council to review the possibility of making a deepwater stamp for their license renewal, and, inside of that, maybe exploring a



couple of different methods, to get some more concrete data from the recreational sector? I mean, is that what we're charged with, just to kind of put some ideas out into the air?

MR. HULL: I think so. I don't think we have to say anything, but I think we should, especially for this, because we all know that this needs to be known, and so keep that thought for a minute, unless Mike or Chip wants to stop us, and we're going down the wrong avenue, and I think Chip tried to get us on the right path to what we want to do, and not really a concrete motion, but just an idea of this is something that's really important for them, and I know the council knows it already, because they've been over this before, but go ahead, Jack.

MR. COX: Well, I was going to say -- Following up on what Chip said, I don't really know how to -- I really don't know what he's asking for. I mean, what I'm saying is we've talked about this for eight years, and we've not gotten anything, and I don't know how much more the fishery can stand, watching what's going on in it, and, at some point, we've got to say that, yes, the commercial fishery is constrained by the number of participants, and the small trip limits now, but we know exactly what the take is, and we know exactly how many participants there are, and so why isn't it fair that we have the other side be the same thing? That's all.

MR. HULL: Robert Freeman.

MR. FREEMAN: We proposed, I think at our last Charleston meeting, that they come up with a recreational permit or something to signify how many folks are actually participating in that deepwater fishery, and, as Jack said, we've been doing this for eight years, and so somebody needs to get the toilet paper and get off the pot.

MR. HULL: Robert Lorenz.

MR. LORENZ: I am following right behind Captain Freeman there with what I had intended to say. In backing Jack's idea, the true value of what we would do, by getting the thought started, is we'll probably focus on two things. One, we would need to come up with a little bit of a thought of what is that deepwater aggregate that you must be permitted, and I will use that word, to fish for, and so we have two things we would have to do.

What's the basket of fish, because they're going to out there, much like a -- I think they're out there more like a supermarket, one here, one of this, and one of that, and then the second thing is the value, the total value, of this is really to find out who is fishing and monitor the population of people that are fishing and how much it's increasing. We, anecdotally, are saying folks are doing it, and we don't know for sure who they are or how many, and so, if we get to the stamp, and it could possibly even be a fee required -- Let's call it a registry.

They just have to sign up and assign the boat or the captain or whoever it is that's going out there a registry, so you know who to talk to or to get your data from. I mean, who do you sample? Don't bother sampling me. I'm never going to have any of these fish, and so that's where I think it would be valuable, what will be the species, and, in some way, we've got to get the names and the numbers of the people, and that's the value to start, and, if we have to call it a registry, just sign it up, and the name has to be entered into a computer, and, if you're found with these fish, that's a start to get our arms around doing this, and then, for the future, how many more are going to be added?

MR. HULL: Okay. I see two more, and then wind this up. David Moss, and then Mike is going to wind it up, and we'll come to some conclusion here.

MR. MOSS: Thank you, Jimmy. I'm going to kind of echo a little bit of what Jack said. I mean, I know we've been talking about this for a while, about this deepwater fishery, and, as more and more people access it, it's going to continue to be more and more of a problem, and we already see that this one has got some issues, and this is with very low intercepts on the recreational side, which, if you go onto any Facebook page or blog or whatever, you can see plenty of these fish being caught, more so than what it shows certainly in the intercepts.

What I would say, and, if we're just throwing ideas out there, one of the other things we could do is a lot of people that are fishing for these fish are, obviously, very technologically savvy, because you need to be to be able to target these things in deep water, but have an app, and I know the council has worked very hard with like the scamp release app and MyFishCount and all these things, and the apps are there, but have some sort of -- Where you register what it is that you caught via the app, and then you can get an idea of not only effort, but also what is happening and what you're bringing in.

MR. HULL: Thank you. Back to you, Mike.

DR. SCHMIDTKE: Thanks, Jimmy. I was just kind of hoping to, I guess, bring this to a direction towards -- If all the comments made thus far, if that's where the AP wants to leave it, those will be noted in the meeting summary, and we can report that to the council, and that's fine. If somebody wanted to move towards some form of formal recommendation, then we can do that, but we can go either way, whatever the pleasure of the AP is at this point, and I just wanted to kind of bring that to the table, that we can get some form of conclusion from the good information that we've received here.

MR. HULL: Okay, AP. Does somebody want to push forward a motion to make a recommendation of what we just talked about? If you do, now is the time. James Paskiewicz.

MR. PASKIEWICZ: Yes, I do. **What I would like to make as an official recommendation from the advisory panel is for the council to define all species in the deepwater complex and the depth at which these species start at. Then make an endorsement that you have to have, along with your regular fishing license, and, beyond that, make it mandatory for a randomly-selected portion to report every trip, whether it's through an app or a paper logbook.**

MR. HULL: Okay. So we're going to -- I just lost my screen.

DR. SCHMIDTKE: That was me. I'm just trying to come up with motion language.

MR. HULL: That would be good, and maybe you can refine it down to as simple and easy as possible, and then, while you're that, I am going to be looking for a -- Well, I'll wait for him to get the motion up, and then we'll vote. We'll get a second and then talk about it more, but, Jack, go ahead.

MR. COX: I was going to make a motion, but it would read just a little different than that, and my motion was going to be --

MR. HULL: Hold on, Jack. Stop. I don't think we need to confuse what's going on with this, and we'll come back. Let's finish this motion here, okay? I think that's what we need to do.

MR. COX: Okay, Jimmy. Sorry about that.

DR. SCHMIDTKE: Jimmy, and I think it was James that made this initial motion, just from a process standpoint, the definition of the deepwater complex and the depth at which those species start, that's certainly good information that would be necessary for some type of stamp endorsement, something like that, to the permit.

Just to assist, process-wise, may I suggest, and you can change the motion however you would like to do it, but it might be better for the council to make the decision that they would like to pursue that, and it's fairly early, and so a broad motion like have the council consider having such an endorsement or stamp or something like that for the recreational fishery would be the first step. Then, those steps that you talked about, we would have those noted, and they would kind of follow, if that's the will of the council.

MR. HULL: I agree, and I was just going to go right back to you, James, since you're the motion maker, and I think that Mike is right on target, to make it a little bit broader and get in there.

MR. PASKIEWICZ: I think that that's correct, but, to be fair, the amount of time that's already been devoted to this topic, not only today, but in years past, I don't think that a broad recommendation like that is going to gain any traction. We can say, yes, we're going to take a look at it, but, without some real bullet points to go from, and say, look, this is what the advisory panel wants to accomplish when you look at this -- That way, it doesn't get swept under the rug again.

We're supposed to be making suggestions that the council takes into action, and I feel like we need to be less than broad here, and that's just my opinion, but, I mean, I don't necessarily want to change my motion. I don't really care if it gets shot down, but I think that we have a very specific structure here that needs to happen, and, if we just say, well, we need the council to look at this, that's really not fair to us to have gone through this entire presentation and say, well, go ahead and go look at it now.

MR. HULL: Very good, and so, Mike, with that, I believe we need to spell out a motion here that James likes, and let's see if we can get a second on it. James, you may have to respond to Mike here, as he's developing this.

MR. PASKIEWICZ: I sure will.

DR. SCHMIDTKE: James, forgive me, but I might need a reminder of the other notes there, but is that general format something that --

MR. PASKIEWICZ: So far so good, and then the third point was really make it mandatory for a randomly-selected portion to report every trip they take in that year, whether that report is through

an app or a paper logbook or whatever, but we need to have what that particular fisherman does the whole year.

MR. HULL: You will need to put the requirement for a stamp on their license or whatever in there, too.

MR. PASKIEWICZ: Correct. Whether it's just a box that you check for the deepwater endorsement, that you want to participate, and it doesn't even have to be any extra revenue involved, if there doesn't need to be.

MR. HULL: So how would you want to word that? There is it up there. **Consider an endorsement to the recreational permit.** There it is. It's up there. **Recommend that the council consider an -- I'm going to read it. Recommend that the council consider an endorsement to the recreational permit and taking the following steps: define all species in the deepwater complex; define the depth at which these species start; and make it mandatory for a randomly-selected portion of the endorsed individuals to report catch and landings for the year.** Is that what you like, James?

MR. PASKIEWICZ: Spot on.

MR. HULL: Okay, and so hopefully you all heard that. Do we have a second for this? I see Myra is there, and maybe she wants to stop us in our tracks here, and I don't know. Where are we at, Myra?

MS. BROUWER: No, I don't want to stop you, but just a clarification. It says "recreational permit" on there, and I assume you're talking about the recreational license?

MR. HULL: **License, yes.** Yes, ma'am.

MS. BROUWER: Gotcha. Thank you.

DR. SCHMIDTKE: I am still learning terms.

MR. HULL: That's good. Okay. I have two hands raised up here now, and one of them is Jack, and one of them is Vincent, and so you'll have to raise it again if you want to -- Who wants to second this, so we can move along?

MR. COX: Jimmy, I will certainly second the motion, because it's exactly what we're talking about here. I was just going to say that, normally, when we have an endorsement, an endorsement is attached to some type of federal permit, when we start speaking of endorsements, and I don't know if there's anything like that in place for the recreational fishery, and so maybe we would just want to start with a permit, rather than the word "endorsement".

MR. PASKIEWICZ: In Florida, there is endorsements for spiny lobster, and it's already done in a recreational capacity.

MR. COX: All right, but it's just kind of a different term than I'm used to on the council, when we were talking about endorsements, and they're usually attached to some kind of federal permit

that's already in place, but whatever you want to do, and I don't know if you want to say "endorsement/permit", to cover both bases on that motion.

MR. HULL: What do you want to do, James?

MR. COX: But I second the motion anyway.

MR. HULL: All right. The motion is seconded, and I think we'll all understand -- They'll understand what we're talking about, this early on, and what need. We've got a second by Jack. AP members, any questions or comments or concerns about this? Raise your hand.

MR. MILITELLO: I don't think it matters, but my license says "lobster permit" and not "endorsement". I am looking at it right now.

MR. HULL: Okay.

MR. PASKIEWICZ: On the recreational license?

MR. MILITELLO: Yes, and I'm looking at it right now.

MR. PASKIEWICZ: Okay. In order to harvest spiny lobster, you need to have a lobster endorsement, and you can't just get a fishing license.

MR. MILITELLO: I know, but I have my fishing license, and, on the back, it says "lobster permit".

MR. PASKIEWICZ: Okay. On the application form, it says "endorsement", but, however that wording needs to happen, I'm onboard with that.

MR. HULL: Who was that talking to you, James?

MR. MILITELLO: It was me, Chris Militello.

MR. HULL: Okay. I think Jack wanted to make another motion, and you don't have any more comment on this right now, right, Jack?

MR. COX: No, Jimmy. I mean, this is fine. This pretty much covers it, and I was just going to go to a little bit -- I was going to leave some of that stuff out for the council, if they even pick up something like this, and they're going to fine-tune it anyway, but I would love to see this happen the way it's written, but I doubt they will go quite so far, but that would be great. At the end of the day, we're just trying to figure out how many participants are, to really help our Science Center. Thank you.

MR. HULL: Thanks, Jack. Vincent.

MR. BONURA: I just wanted to ask -- Is this for an individual or for a vessel? James?

MR. PASKIEWICZ: I mean, that's a great question. I think that, since recreational fishing pretty much is by individual -- I mean, the last time I checked, you don't have a recreational vessel fishing

permit, like we do for the South Atlantic commercial sector, and I think this would be for an individual, but I could be mistaken.

MR. BONURA: Okay, but wouldn't that be more geared toward Florida, Georgia, Carolinas, than a federal permit is more geared towards a vessel, in my opinion.

MR. PASKIEWICZ: No, and, I mean, you're absolutely correct, and so we would have to, I guess, further define what it is. I mean, as a recreational fisherman, what makes you able to fish in federal waters? What do you have to do?

MR. BONURA: Well, there is a -- HMS does have a recreational federal HMS permit that is for each vessel.

MR. PASKIEWICZ: That covers the highly migratory species, correct? So you're asking if this would be like an HMS-type situation, which is a great point. I don't know that I could answer that, but, I mean, that really is a great question, and it really would pertain to the vessel, in my opinion, and so that does look like it makes it more complicated, but I'm not sure that it totally changes it.

DR. SCHMIDTKE: If I could jump in, just, at this stage of the process, the wording -- I think the spirit is conveyed, and the wording doesn't need to be specific to what's going to go into codified language or something like that, and so, I mean, I put the text edit of "entities" on there, but I think that, from the information here, it's kind of conveyed to the council what is desired from this motion, if that's okay with you all.

MR. PASKIEWICZ: Yes, I'm okay to be more general in that way, with these specifics, and that's fine by me.

MR. HULL: Good. Andy Fish.

MR. FISH: I was just going to put that these fish are caught in federal waters, and why not be a federal permit to the boat? I think it's easier, just in my opinion, and that's all I'm saying.

MR. HULL: Okay. I think that, if it ever gets going and done, they're going to figure out the best way to make it happen by what permit, endorsement, license, check-the-box, whatever. They'll figure all that out. Myra, you're up.

MS. BROUWER: Thank you, Jimmy. Just a couple of things, for the benefit of maybe some Snapper Grouper AP members that haven't been around that long, but the council did have an amendment, Amendment 46, that they started working on a number of years ago that had an action to possibly consider a federal permit for private recreational vessels and individuals, and it had a whole bunch of different alternatives for consideration, and that amendment has been put on hold, pending deliberations of this private recreational workgroup that Jessica mentioned at the beginning of the meeting, and so I just wanted to make sure the AP was aware that those conversations are continuing, kind of in the background, so the council has all the information they need, because this sort of thing gets a little complicated, as you have noted just now.

There's a lot of things that need to be worked out, state versus federal, and who pays for it, and how do you fund something like this, and all those things are being talked about by this workgroup, as I said, that Jessica mentioned.

Another thing I wanted to point out is that the deepwater complex has already sort of been defined within the snapper grouper fishery management unit, and so just to clarify, on the record, I imagine that you guys are talking about defining species that are targeted in deep water, snapper grouper species that are targeted in deep water, and then -- I'm looking at my notes. That's all I had. Thank you.

MR. HULL: I think you're spot-on on that, on your comments there, and, yes, that amendment may come back, as you say, and it seems like it's been kind of like kicked to the side for now, but, obviously, it's probably coming back, and maybe this will make it come back quicker. David Moss, you're up.

MR. MOSS: Thank you, Jimmy. Myra actually just said about 90 percent of what I was going to say, and I don't know that we need to parse out so much whether this has to be a boat permit or an individual, and, I mean, I would think individual, just because, for the most part, for recreational anglers, we don't have to worry about federal stuff, like you said, unless you do HMS, but even that -- Then you would have to worry about is the state administering it, and how do you do that, and so on and so forth, and so that's something that I think we could worry about a little bit down the road. It's important for us to get this out there.

The only thing I will say, and I do support this, by and large, and the only thing that I would put on there that I would want, for me personally anyway, is I would like to take it a step further and make it that there's some sort of -- Again, I'm going to throw out the app thing, that there's some sort of mandatory reporting of these rare-event species on an app that would just make all these encounters -- Every time you encounter one of these species, it's that much more important, and, for any number of reasons, not the least of which being that -- Somebody already said it with the lobster permit.

Like in Florida, if I want to keep a snook, I've got to get a snook permit. If I want to keep a lobster, I've got to get a lobster stamp, and then there's the HMS stuff, and then now we also have the reef fish survey, which I'm all for all of this stuff, and don't get me wrong, but, as I'm renewing my license every year, it's a lot of boxes to check, whereas, if I'm pushing for this, and I have an app -- I mean, most of the people that are fishing for these, as we already said, they have posted it to social media already before they get to the dock anyway, which is why we know, even if it's anecdotally, that there's all kinds of encounters with these animals, and so I'm just throwing that out there. Again, I do support this, for the most part, and I would like to take it a step further and have some sort of reporting with the app, where, anytime that you encounter one of these, you report it.

MR. HULL: Thank you for that. I think we should consider massaging it further after we get this one done, and then, if they're going to look at this, we're going to have plenty of time to massage this thing and comment on it, and it will come back to us a bunch more times, I'm sure. Chris, you're up.

MR. KIMREY: Myra covered all the comments that I was going to make, and she covered a whole lot more, but, real quick, because I know that everybody is probably ready to go, with this deepwater stuff, it seems that it would almost have to be a permit on a boat. You know, there's already a shark endorsement attached to some of the permits, and these kinds of things, and, if you were going to do it, it seems like that would be the most streamlined way.

It wouldn't make a whole lot of sense, to me, to do it on an individual basis, because there's lots of people that go deep-dropping that don't own a boat that will get them deep-dropping, and so they're going to be going with their buddy, and their buddy should bear the responsibility of having the proper permits. Also, it would narrow the numbers down, and it would allow you to fine-tune the reporting, if you were going to implement -- Whether it be a random call or something like is in the motion, where it's mandatory for a select group. The smaller number of permits doesn't necessarily mean that it's going to be a smaller number of anglers that are reporting on it if it's done by the boat. I mean, that just seems kind of common sense to me.

Also, as far as attaching stuff to state licenses, you're basically attaching a federal -- If you want to call it a permit or a license or whatever to a state license, but it would just seem far better to have this as something separate from that state license, because there is so many people that have no idea what a snowy grouper is that are buying a fishing license and just fishing on the beach or whatever. Anyway, that's about it.

MR. HULL: Well, those are points well taken, and it's stuff that I think will all have to be considered and massaged into this, when the council does take it up. No more hands raised, and the discussion is over, and we're going to have a vote on this. **Is there anyone who is opposed to this motion? Raise your hand. No hands raised, and so we have a motion, Mike, and it's unanimous.** Back to you and Chip.

DR. SCHMIDTKE: Actually, Jimmy, I think that kind of concludes that agenda item, and we're at a point right now where we could probably stop. Tomorrow morning, we have a little bit of a scheduling conflict, and so, if it's okay with you, would it be okay to switch greater amberjack to first thing in the morning and move yellowtail to after amberjack?

MR. HULL: That would certainly be fine with me.

DR. SCHMIDTKE: Okay. That being the case, I think we can wrap up for today.

MR. HULL: All right, and so, AP, you guys did a great job, and I'm really proud of what we accomplished today, and so what time, Mike, works for you in the morning?

DR. SCHMIDTKE: I believe we are scheduled to begin at 9:00 a.m. tomorrow, and I will be on at 8:30 to start doing audio checks.

MR. HULL: Right on. Sounds great. We'll see everybody at 9:00 a.m. in the morning, and I wish I could see you, but we'll hear everybody at 9:00 a.m. in the morning, and everybody have a good night. Thank you very much. Meeting adjourned.

(Whereupon, the meeting recessed on April 21, 2021.)



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APRIL 22, 2021

THURSDAY MORNING SESSION

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The Snapper Grouper Advisory Panel of the South Atlantic Fishery Management Council reconvened via webinar on April 22, 2021 and was called to order by Mr. Jimmy Hull.

MR. HULL: Good morning and welcome back, everyone, to the April edition, 2021, of the Snapper Grouper Advisory Panel. This is going to be a full-day session, and I sure miss the personal meeting and having good interaction with you all, and hopefully we get back to that soon, but, with that, we've got a good turnout, and, as Mike said, we're going to switch it up a little bit this morning from the agenda and start with greater amberjack, Amendment 49, and so back to you, Mike.

DR. SCHMIDTKE: Thanks, Jimmy. The first thing we'll get to today is the fishery overview for greater amberjack, and, after that, we will take a look at -- There's a discussion document in -- We'll do the fishery overview first, and then we'll get into Amendment 49, and there is a discussion document that is in your briefing materials, and I'll show that, and we can walk through what those actions are for that amendment.

First, jumping into the fishery overview application, and this is similar to what Chip showed you yesterday for snowy grouper, except this one was built for greater amberjack, but it contains a lot of the same information, and so we have information from the stock assessment as well as some landings data, combined and by sector, as well as some life history data. The tabs that you have at the top are the same as what we saw for snowy grouper yesterday, where you have your history of management, and, within this, a list of all of the actions that affected greater amberjack.

Then you have the most recent fishery performance report for greater amberjack, and that's something that you all can take a look at and kind of recall some of your discussions from before the assessment got underway, and then, finally, in the graph section, we have several graphs looking at pieces of information, and I am going to highlight some of these, and I won't go over every single graph, but I will go over a good chunk of them, because some of these will help kind of set the stage for going through Amendment 49 and for you all to give some feedback on the alternatives listed there.

First, I will look at the assessment output, and this is from the most recent SEDAR 59 assessment that was finished last year, and some of this information is in Amendment 49, and I will try not to be too redundant when moving from here to there, but bear with me if that happens by accident.

The first thing that we see here concerns the fishing mortality rate for greater amberjack, and the big takeaway is that the points toward the end of the time series that we see here are below the fishing mortality that would produce maximum sustainable yield, and so the overfishing is not occurring for South Atlantic greater amberjack. Scrolling on down to our spawning stock biomass

figure, we see the solid line, and that's our reference point for biomass, and the biomass is above the reference point, and so greater amberjack is not overfished.

Looking here at this kobe plot, this shows the overfished and overfishing status throughout the years, and what we see from this is that there was some overfishing that occurred in the early 1990s, but the stock, during the time period looked at by the assessment, has not been overfished, and overfishing has not occurred since that early 1990s time period.

Looking next at recruitment, this was something that really played a part in some of the positive outlook and the positive projections that we saw coming out of this assessment. Recruitment has kind of bounced around the  $R$ , the  $RMSY$ , and that's the recruitment that would produce maximum sustainable yield. It has kind of bounced around that reference point throughout the time series, but one thing to kind of note is that, in recent years, a lot of these years here at the end of the time series have been above that reference point, and so that has kind of a positive outlook, because that means that more fish recently have been able to enter the fishery, and the projections that are coming out of the assessment are going to weigh a bit more heavily, the recent performance, because that's going to produce the fish in the predicted years.

One thing to keep in mind, when looking at the projections and the ABC recommendations that are coming out of this is that they are a bit dependent on these high recruitment levels being maintained into the future, and what we saw previous to these high recruitment levels was there was a period here where a good chunk of these years are below the  $RMSY$ , and so, depending on how this population cycles, that can have an impact on what the outlook of this fishery ends up being.

Then the last thing I want to bring up, concerning the assessment output, are the indices of abundance, and this would be looking at -- This would be looking at the amount of fish that are estimated in the population, the relative amount rather, from these various surveys, and so we have a commercial survey, a headboat survey, and a video survey, and kind of another thing to keep in mind that plays a part in the projections and the positive outlook of this fishery is that, towards the end of this time series, we see an uptick in the commercial survey, and we see an uptick in the headboat survey.

The video survey, there's a little bit of an uptick, but it's not as strong of a trend as the headboat and the commercial, and it's not as long of a time series, but that's something to keep in mind when evaluating what you all and what the council wants this fishery to look like in the future, is that these figures, this high biomass, relatively high biomass, at the end of the time series, and the relatively high recruitment at the end of the time series, these are playing a part into some higher projection numbers.

Next, looking at the landings, first looking at the combined data -- I apologize for the delay. While I'm trying to reload this page, I guess we can check in and see if anybody has any questions on that assessment information.

MR. HULL: No hands, Mike.

DR. SCHMIDTKE: All right. In looking at the landings figures, first, this first figure looks at the percent of the sector ACL that was landed by each sector, for the commercial in gray and the

recreational in blue. As a reminder, the commercial and recreational fisheries are allocated from the total ACL, with 40.66 percent of the total ACL going to the commercial and 59.34 percent going to the recreational.

What we see from this figure is that both sectors have approached, or exceeded, their respective ACLs a few times in recent years. There have been also a few years where they haven't approached or exceeded their ACL, and so it has kind of bounced around a little bit on that figure. The most prominent wave, scrolling down to the landings by wave, the most prominent wave for landings has varied quite a bit over the last twenty years, and we see a few years where Wave 3 or Wave 4 is the highest landings, and then we have a couple of years in there where we even have Wave 1 as the wave that has the highest landings, and so it has kind of moved around quite a bit over that time series.

Looking on a regional scale, most landings come from Georgia and Florida, although North Carolina and South Carolina both have consistent fisheries, and those are typically harvesting in the range of hundreds of thousands of pounds.

Especially given some of the comments that were made by Paul Nelson, when he gave his public comment at this meeting, and Paul commented as well, and there were a couple of AP members that provided comments at the scoping meetings that were held for greater amberjack, Amendment 49, and those comments were focused a bit on the commercial trip limit, and so I do want to make sure that I point out some of the information that we have that would be relevant towards making a decision, or a recommendation, concerning that commercial trip limit.

First, looking at the commercial catch, in this first figure, we see the landings at the top and the commercial releases at the bottom, and one thing we've seen in more recent years is there is kind of a downward trend in the commercial landings, but the releases have stayed fairly constant, with maybe an uptick here towards the end of the time series, but they're certainly not following the landings in that capacity, and so, especially towards the end of the time series, the releases would be making up a higher portion of that catch.

Looking next at the commercial length compositions, commercial lengths typically have a pretty strong central tendency, and they tend to be centered around that forty-inch fork length mark, and you can see that, with a lot of these, the highest value is right on that forty-inch line, or you may have two peaks that are surrounding it, something like that, but it's pretty focused on that forty inches fork length mark.

In 2012 through 2018, the bulk of commercial landings were from ships harvesting the 1,200-pound commercial limit. You see the amberjack per trip as a portion of the poundage, and then, down here, we can see it in a trip capacity, and so we also see, from the trip frequency, a similar, relatively high number of trips, that were reaching the 1,200-pound limit in most years, but, in both of these, one thing to notice is that, in the most recent year of data that we have, 2019, that 1,200, that limiting-out mark, dropped, in terms of poundage, as well as the frequency of trips that were hitting that mark.

One thing to consider, as we're moving forward and thinking what could this fishery look like in the future, is that, in the following year, 2020, the council implemented the commercial split season, with the intent of trying to extend that commercial season throughout the full year, and the

way that this impacts the limiting-out factor is that the trip limit in the first commercial season is 1,200 pounds still, but, in the second commercial season, the trip limit drops down to 1,000 pounds, and so, looking forward in this fishery, we may see a bit more of that thousand-pound category and a bit less of that 1,200-pound category, because of those different trip limits.

Next, looking at the recreational sector -- It's taking a while to load. I apologize for the wait time. If some of you are kind of looking at it at the same time, sometimes Shiny can get a little bit bogged down, but it should be coming through soon here.

Looking at the recreational sector, the recreational releases, which are shown here by the dotted yellow line, versus the landings, shown by the solid blue line, and the releases are pretty -- Generally, they are tracking a pretty similar trend to the landings. We've seen pretty variable numbers of fish over the last twenty years, and there is some level of an increasing trend, pretty high numbers with the releases, towards the end of the time series, and so it's turning up a little bit in that capacity, but the landings kind of vary around the central number in that way.

Similar to the commercial fishery, recreational landings in the South Atlantic generally have occurred throughout the year, and we see some capacity of recreational landings in almost every wave that's shown here, the exception being, typically, if the fishery was closed early, and the most prominent wave in the recreational landings also has kind of moved around a bit, and we see it in Wave 1, Wave 3, Wave 4, and it kind of shifts around.

Most landings, for the recreational fishery as well, occur in Georgia through Florida, and, looking at the length distribution, the sizes seem to line up pretty well between the charter and private fisheries. They kind of overlap quite a bit, and you can see that with the blue, showing a similar trend to the gray, and it's kind of sitting right on top of it, just at a lower level.

Finally, looking at a couple of pieces of life history data, we can see, from the von Bertalanffy length-at-age figure, that greater amberjack show -- Putting it in the perspective of what we saw for snowy grouper yesterday, snowy grouper show a pretty slow growth rate, and this is more of a moderate growth rate, and you see the ages here plotted from zero to ten, and, looking at maturity information, using what was used in SEDAR 59, females exceeded 50 percent maturity at age-two, which will be shown by this point right here, and that's sitting at about 62 percent or so, and that's the first year that they exceed 50.

Then, by the time they are at age-four, they are basically 100 percent mature, and that corresponds -- That age-two fish is corresponding to a length of approximately -- An average length, that is, of approximately thirty inches, and that 100 percent mature figure is corresponding to a length that is about thirty-seven or thirty-eight inches, those being fork lengths. That is the information from the overview, and I can pause, once more here, to address any questions with the overview information.

MR. HULL: Rusty, go ahead.

MR. HUDSON: What was the 50 percent to maturity size there, Mike?

DR. SCHMIDTKE: We have -- At age-one, they are below 25 percent, and then, at age-two, they're at about 62 percent, and so it would be somewhere between age-one and age-two that we would have that 50 percent mark.

MR. HUDSON: At age a little over four, and you said thirty-seven inches or something?

DR. SCHMIDTKE: Yes. Thirty-seven inches, age-four, is where --

MR. HUDSON: That's 100 percent, and we've got a thirty-six inch commercial, and, what have we got, a twenty-eight-inch recreational?

DR. SCHMIDTKE: Yes.

MR. HUDSON: Okay. Fork length. Okay. Thank you.

MR. HULL: Any other AP members that have a question at this time? I don't see any more, Mike.

DR. SCHMIDTKE: All right. Thank you. Next, I will move over to Amendment 49, and we can go through this document together, and so the background information is largely assessment oriented, and I won't rehash all of that, but the basic motivation for this amendment is that the assessment was completed, and it was the first assessment since the changeover in the MRIP numbers to the FES survey, and so we're going through the catch levels and looking at potentially revising sector allocations.

There was one more item that got added in a little bit later, looking at these recreational annual catch targets, and I will give a bit more information about that when we get to Action 3, but the basic point being that those are being considered from removal, and that's not just for greater amberjack, and that will be applied to the entire Snapper Grouper Fishery Management Plan.

For this meeting, what we're hoping to get out of the AP is guidance on the actions that are being considered and the range of alternatives that are being considered. If you all would like to recommend preferred alternatives that have not already been selected by the council for the current actions, then this would be a good time to do that, and, if you all have any additional changes to management measures that you would like to recommend that should be considered -- Right now, we're still early enough in the process that you can recommend that to the council, and the council can direct staff to incorporate that, and we're still at public hearings and all of that, and so we could add things, if that's the will of the council.

Scrolling down, we see kind of the timing that we're working with. Last week, scoping hearings were conducted for this amendment, and, in June, the council will review the scoping comments and any input that you all provide, as well as some of the preliminary analyses that were included in the scoping documents and have been conducted. In September is when the council would consider this amendment for public hearings. Then, kind of moving on down the line, they would consider it for final approval in March of 2022, with the regulations becoming effective potentially later in 2022, that summer or early fall.

I'm going to go ahead and scroll through the purpose and need, and I can pause one second, because I see that Rusty has his hand up, before we go in to the ABC and OFL recommendations. Did you have a quick question on that information, Rusty?

MR. HUDSON: Yes, I did, on the scoping from last week. Is there any Cliff Notes version that we can hear about today?

DR. SCHMIDTKE: Sure. Really, the main comments that we got back were the ones concerning the commercial minimum size limit. There were questions about kind of the origin and reasoning why, why there is a thirty-six-inch commercial limit versus a twenty-eight-inch recreational limit, and so we've kind of -- It's been a fairly short turnaround, but we have had some conversations and done some looking, and so that is something that has been in place for quite some time, since I think it was the 1990s when it was put in place, and it was kind of in reaction to that period of overfishing that occurred in the early 1990s, but the thirty-six versus the twenty-eight --

One of the things that was noted from the past meetings is that the thirty-six-inch commercial limit was consistent with the state limit that was in place at that time, and so, to not create a conflict between two different managing bodies, it was put as a consistent limit between those two. That's really what -- We didn't get a whole lot of comments, but, the ones that we got, that's kind of what they were focused more on, was the commercial limit/recreational limit disparity.

MR. HUDSON: Okay, and, of course, we realize now, with what you told me earlier, that the commercial size limit is bumping right against the 100 percent rate for the amberjack maturity, whereas the recreational is just a little bit above the 50 percent, which sometimes a lot of management things can use 50 percent maturity to be able to use that as a minimum size, and nothing about trying -- Because I'm understanding there is an increase coming out of this amendment, both recreational and commercial, and the recreational has the lion's share, but, going back to the commercial, is there a chance that some of the people might have mentioned something about going to 1,200 pounds on the second-half of the season, versus the 1,000 pounds?

DR. SCHMIDTKE: Not that I heard within the scoping meetings. I might have to look at the written comments and see if maybe something got brought up there, but it wasn't brought up within the meeting of changing that second season limit.

MR. HUDSON: Okay. Well, I've heard some questions about doing that, especially in light of an increase and trying to catch stuff. Anything on shark depredation? That's my last question.

DR. SCHMIDTKE: We have at least heard comments via Facebook concerning shark depredation, but nothing that was said on the record within the meeting, and so it's -- We're aware that that's an issue. I'm not sure how much that can be addressed in this specific amendment by the actions that are being considered here, but that is something that we did here.

MR. HULL: Mike, James has his hand up, but, before he goes, to reiterate what you said, the commercial size limit was put in place back in the 1990s because of the overfishing status of the stock at that time, and is that correct?

DR. SCHMIDTKE: Yes, and I guess, to more characterize it, a size limit was put in, and kind of the setting of where it was, why it went thirty-six and twenty-eight, was to cater that limit to be the same as Florida.

MR. HULL: And to be consistent with the Florida state size both. Okay. Thank you. James.

MR. PASKIEWICZ: Thank you, Jimmy. Going along with some of Rusty's points, and just looking at this fishery as a whole, and speaking with some of the fishermen that I represent in my geographical area, I'm looking at a twenty-eight-inch size limit for the recreational sector that is at approximately a 50 percent sexual maturity, and they typically harvest about 60 percent of the ACL.

In the commercial sector, at a thirty-six-inch fork length size limit, with that species nearing 100 percent sexual maturity, harvesting 40 percent of the ACL, just looking at this, I would think that we should be able to recommend a mean thirty-two-inch size limit here and maybe having the mean reproductive maturity a little bit higher, when it comes to what's actually being landed. I don't know if this is the right place to say that we should have a thirty-two-inch size limit overall for amberjack, but I do think that this is something worth discussing, as well as the harvest, the trip limit, during the closed month of one amberjack per person per day.

That's consistent with the commercial and recreational sector. I have had some jack fishermen say that, during the month of April, there should only be one amberjack per vessel harvested, and not per person, and so I would like to start some discussion on some of those things and see where everybody stands on that.

MR. HULL: Mike, is it appropriate at this time to address that, or do you want to keep moving through and come back to it?

DR. SCHMIDTKE: I think, James, if we can put a pin in that, until after I go through the actions that are considered, and we can get some feedback on those that are considered, and then we can have some discussions about those that the AP would like to potentially add.

MR. PASKIEWICZ: Sounds good to me.

DR. SCHMIDTKE: All right. Thank you.

MR. HULL: Rusty has his hand up.

MR. HUDSON: A real quick question. Do we have -- What is the fork length in the Florida waters been changed to, if it was thirty-six inches twenty-something years ago?

DR. SCHMIDTKE: As far as I know, it's still thirty-six inches, from the state end.

MR. HUDSON: Thank you.

DR. SCHMIDTKE: All right, and so, next, just kind of reviewing the acceptable biological catch and overfishing limit recommendations from the SSC, the SSC looked at the SEDAR 59 assessment and the projections, and they recommended values that were consistent with the

projections that would have a fishing mortality rate that is equal to the fishing mortality rate that would produce maximum sustainable yield, and so  $F$  equals  $F_{MSY}$ , and it came up with these levels of overfishing limit and acceptable biological catch.

One thing to note, when looking at these figures, and it would play out as these move through the process to become ACLs as well, is that, as we're going through the years that are further and further out from the assessment, we have, initially, a very high increase to the allowable catch. Then it declines as you go throughout the time series, and that's because the stock is not overfished, and so there is this theoretical surplus, so to speak, of fish that would be harvested by a higher limit in the earlier years, but, as you go through the projection, further and further out, then that limit levels off at that maximum sustainable yield level. That would level off closer to that maximum sustainable yield level.

Now I'm going to go through the actions that are being considered. First, we have consideration of the total annual catch limit and annual optimum yield. The first alternative would be to keep it where it is, at about two-million pounds whole weight. The council did review these alternatives, and they selected a preferred, at the last meeting, and this preferred would keep the current relationship that is in place of ACL, total ACL, equaling the acceptable biological catch, and the only difference is that this would update to the new numbers recommended by the SSC that also take into account the MRIP-FES changeover.

Alternative 3 would put in place a buffer between the ACL and the ABC. This is sometimes used in fisheries that have difficulty managing to an annual catch limit, and so this would put a 10 percent buffer in between, and so these numbers are just 10 percent of those that are shown in -- Or 90 percent, rather. They are 90 percent of those that are shown in Alternative 2, and Alternative 4 would put in a 20 percent buffer, and so these numbers are 80 percent of the ABC.

Just a little bit of discussion surrounding these alternatives, and the current ABC was established through the Comprehensive ACL Amendment, and it was calculated using the MRFSS recreational data, and so we did have that changeover from the MRFSS data, and what we would be using from this point forward would be the MRIP-FES data. Then the commercial and recreational fishing seasons, just making sure we note this, that they are not calendar years and they run from March through the end of February, and we have, for the commercial fishery, that split season in place that just went into effect last year.

I will pause here, so that there can be discussion and any feedback you all would like to give on the range of alternatives that are being considered, as well as if there's any recommendation on a preferred alternative, noting that the council has selected a preferred of Alternative 2.

MR. HULL: Okay, advisory panel members. Do we want to make a recommendation here that we differ from the preferred that the council has chosen, or do we agree with it? I see James has his hand up. Go ahead.

MR. PASKIEWICZ: Could you scroll up a little bit to the preferred method there, or the preferred action? That is Action 2, and so we're looking at a little bit over four-million pounds, a 4.4-million-pound ACL, diminishing all the way to a 2.7-million-pound into the seasons in 2026 and 2027, and we would be moving away from an ACL of almost two million pounds, and am I correct in that right there?



DR. SCHMIDTKE: Yes.

MR. PASKIEWICZ: For me, as a commercial fisherman, somebody who likes having a consistent number, why wouldn't we just move to a 2.7-million-pound ACL and not harvest, or potentially harvest, that many more fish right from the jump that might limit what we can do long term? I would like some discussion on this and just see where everybody stands on the possibility of getting a consistent ACL over a longer period of time.

MR. HULL: To James' point, Randy, you're up.

MR. MCKINLEY: I am sort of with James on that. I mean, why jump way up and then, two or three years from now, another stock assessment shows we're in trouble, but the first question is did the council make any decision, or even talk about, a change in the size limit?

MR. HULL: I don't know that the council did. Mike can answer that better, but, in the scoping, the discussion has come, and we had a public comment to that effect at the beginning of the meeting, and so we're probably going to come to that topic here shortly.

MR. MCKINLEY: Because I would rather see the size limit go down and keep the weight about the same, so we don't run into any kind of problems, and, for a fish that size, when you're trying to bring a thirty-five-inch amberjack into the boat and trying to measure it, you're going to probably have to gaff it and just cause more trouble, but, if that size limit was lower -- It just seems like it just would make more sense to lower the size limit and not go way up on the total allowable catch.

MR. HULL: Thank you. That's good input. Very good.

DR. SCHMIDTKE: From the council end, they have not talked about the size limit within kind of the council meeting yet, and we have had conversations with council members, in follow-up to what was brought up by scoping, and this was kind of -- For some of them that attended, this was one of the first times hearing about this, and so it's something that's being talked about, and there is potential interest in a conversation that could be had, maybe at the next meeting, but, if you all would like them to take this up, then that's something that can be recommended, but, again, that might be one of those items that we come back to after we've gone through the actions that are included.

MR. HULL: Thank you. Vincent, you're up. Are you there, Vincent? We'll come back to you, Vincent. Harry, you're up.

MR. MORALES: Well, I'm on the recreational side, and so it's new, for me, listening to the commercial fishing. I would say that one year as a drunken sailor, going from two whatever and all the way to 4.3, and then to have to work your way right back down to where you were, that doesn't make a whole lot of sense to me, and I would agree that, if you're trying to bring in a thirty-three or thirty-four or thirty-five-inch fish, or a thirty-five-and-a-half-inch fish, and find that he's not legal, you're either beating yourself up, beating the fish up, damn near killing the fish, for what purpose? If we've got that big of a gap that we can eat into, you simply reduce the length

limit and allow them to have a more productive catch, and perhaps we can actually have a fishery that we don't have to stipend to death.

MR. HULL: Good points. Thank you very much. Were you done? Keep going, if you're not.

MR. MORALES: Well, I just think that -- I think we're looking at this wrong, and I don't know what the Florida state limit is, but, if the state limit is thirty-six, then, as a total fishing community, we have to petition and get that number to an agreed number below thirty-six. I don't know about raising the recreational beyond twenty-eight, because, again, we're not as professional as you are, and so it's a little bit easier handling a twenty-nine or thirty-inch fish knowing that you have reached the limit and bring them in. Hell, I've even used a damn net, and it's sort of difficult to pull them out of the water, but I've done it, to just make sure that he's the right size. These are strong fish. I mean, that's why they're called reef donkeys. I mean, they're strong, and so I think we're looking at this the wrong way.

MR. HULL: Thank you. I think we're going to come to some type of agreement to do something here. Rusty, you're next.

MR. HUDSON: Thank you, Jimmy. I was looking at the state stuff, and, indeed, it's thirty-six inches fork length in state waters, and that includes the imports that come into the State of Florida, but, that being said, there is another mechanism, instead of doing the step-down, this five year, and, of course, if they don't have a new stock assessment at the end of 2027, it just stays that 2,669,000 pounds, but it only drops that 30,000 between the year before and up until then.

To me, and I'm looking at nearly 4.4 million, stepping down to 2.7, it would be easier just to create the average between the high and the low and just make that the same for those first five years, and then you could go to, if you needed to, the 2027 plus, at the 2.7, approximately, and I'm just throwing that out there as an idea, and, on the Gulf side, recreational is a thirty-four-inch and not a twenty-eight-inch, and the twenty-eight-inch is on the Atlantic side, as far as federal waters, and I guess maybe state, I guess, is part of that too, and so changing it to thirty-six and making it more productive, and probably going down to a thirty-two-inch, as has been bantered around, and I have heard thirty-three.

I've heard all the way down to twenty-eight, but we just have to figure out if we want to be able to keep the stock healthy, and that means we don't want to fish things down too hard, and I think everybody is liking the fact that there will be an increase. The recreational won't know their increases for a year-and-a-half after each fishing season, but the commercial will know it each year of the fishing, and so just some ideas that I guess the council would ultimately have to ponder, because we've only got the scoping so far. Thank you.

MR. HULL: Jack.

MR. COX: Good morning, Jimmy.

MR. HULL: Good morning.

MR. COX: I'm a commercial fishermen on the AJs, and I've been doing it for a long time, and we count on the AJ commercial fishery for a chunk of our income. I'm in North Carolina, and our

fishery is a little bit different than Florida. We catch a lot of our amberjacks in fifty to a hundred feet of water, commercial fishing, and I think those guys are a little bit deeper than us, but just a couple of things to note. I would love to see a consistency on the recreational and commercial size. If we go to thirty-three inches, which I would think would be a great size to go to, and it looks like something in the chart there that would be very appropriate, across-the-board, for recreational and commercial.

We do see a lot of fish in that size range that would work really well for us, and, as far as the ACL dropping down like it does, there's a reason that the Science Center does that, and I can't remember what -- We do that with snowy as well, but it was some kind of conservation measure, why it did that, but that is a pretty heavy jump, from the four million pounds down to the two, and I would love to see something like James said, maybe something a little more consistent, so we didn't take such a hit later.

That's what I had to say on the ACL, and I will just throw another couple of comments in there. We have a 1,200-pound, on the commercial side, a 1,200-pound trip limit in the beginning of the year, I think, and then it goes to a thousand later in the season, and so we don't meet our ACL, but, now that we're going to get a bump in it, I would love to see us recommend that we go to 1,200 on both sides of our split season trip limit.

Anyway, it's encouraging, and I'm not seeing the fish on all the reefs that I used to see when I first started fishing on these in the 1980s, and I wish I did, and they're in a lot less places, and I think that the assessment was a lot more robust than I was expecting, but I'm not going to argue that point.

Maybe they see something somewhere else that we're not seeing, but I will say that keep in mind that, as we see some of these other species go into a more conservative catch mode, we're going to see an increase in the fishery on the AJs, and so I wouldn't -- I wouldn't want to jump out there and put too much pressure on them, because we are -- I'm expecting that we're going to see some conservation measures on the gag groupers, and we're going to shift over in our effort from gags to AJs, especially with the price increase that we get on AJs now, and we're getting in excess of \$1.50 to \$2.00 a pound to the boat on AJs now, and that's a pretty big increase from what we had years ago. Those are my comments, Jimmy. Thank you.

MR. HULL: Thank you, Jack. Robert Lorenz, you're up.

MR. LORENZ: Thank you, Jimmy. I am coming from the recreational side, but I'm going to make a few comments with respect to fish that would be on the commercial side, and I know we have some folks in the restaurant business here and the wholesale business and retail business, and so they may comment back on some of what I will say, and so I'm coming from a logic point of view on a lot of this, but I agree with the comments that James initiated about starting out, in the next year or so, with a very high ACL and bring it down.

Like I said, I don't commercial fish, but I have been on this committee for a while, and I'm a little concerned about jacking up an ACL so quickly, particularly when it can be increased anyway to a reasonable limit, and let's say the 2026 or 2025 numbers, or even the 2024.

I worry about all of a sudden -- I would be wondering if the commercial fishery -- If you have a bunch of people quickly entering this fishery, for whatever -- To participate in it, with the ACL so high, and then you're going to cut it back, and you will cut the legs off in future years, thereby causing an economic problem, and so I kind of agree with -- Yes, the stock is healthy, and so increase the annual catch limit, but not so greatly and then have it decline. I would think more steady, or keep an eye on it and maybe slowly let it go up. Again, the concern being don't flood the market with a bunch of fish and then cut people's legs off later.

One of my reasons also for that comment is, at least in my area, and I know these are a very good food fish, but they are -- I don't see them as being extremely popular and in demand by the general public. In our restaurants, you're going to see it's a lot of grouper and mahi, depending on where they come from, and, around here, some of inshore species get popular, and sheepshead are getting ever more popular, and speckled trout, and flounder, what people want. I don't seem to see amberjack in the fish markets that much, or as a special on restaurants, which I went to quite a few of prior to this, and so I think a demand could be built, where these fish could become a little more available, but I'm not seeing the public demanding an increase in the amberjack supply. Again, my worry is don't crash the price too much by having too much supply.

With that said, with the health of the stock, I think there could be some reason for say an increase in the trip limit for the commercial folks, and I think standardizing the size limit on commercial and recreational may make some sense.

Again, speaking as a private recreational angler, one of these fish, or maybe two, on a boat with four anglers out recreational fishing, is more than enough for people on the recreational side to pass around, and so the ACL, at this point, that we already have is probably adequate, because we're all leaning more and more to not freezer stocking anyway, and, when we catch fish, we'll eat what we can fresh, and then we stop, and so I don't see why the recreational ACL, if it goes any higher, would actually be used.

Again, people get enough of this from what they have, and, in fact, when fishing for some species, if you want to go for African pompano or hogfish or something, you may actually find amberjack on some artificial reefs getting in your way, and so I would agree with the comments for a more stable ACL and a consistent size, and maybe a more consistent static trip limit, and maybe a little decrease in the size of the fish that people can take, because it seems like the resource can take it. Thank you.

MR. HULL: Thank you, Robert. Kerry.

MS. MARHEFKA: Good morning, everyone. I'm sorry to barge in on your conversation, and it's really valuable, and I appreciate you all being so thoughtful with this. I just wanted to suggest, as you all talk about the size limit issue, that I would love to hear more about some comments that, Jimmy, you raised at public scoping, and that Paul Nelson did, specifically relating to worms being less prominent in smaller fish and getting a smaller fish to the boat faster, thereby maybe saving some of the fish from sharks, and that would certainly -- If we're looking at a smaller size limit for the commercial guys, that would certainly help build the record, and I would like to get more educated on both of those as well, and so I just throw that out there for your consideration as you have your discussion, and, again, I really appreciate everything I'm hearing here today.

MR. HULL: Thank you, Kerry, and, yes, I'm in the restaurant business, and the market business, and a smaller-sized amberjack is much preferred to these larger animals, for lots and lots of reasons, on the marketing size, and also on the harvesting side. It's just much easier, as you've heard, to deal with these smaller animals and have a lot less dead discards trying to basically high-grade into the arbitrary size limit, but that is my response to that part of your request. Worms are an issue, and ciguatera is also an issue. This animal is prevalent to ciguatera poisoning, and it's something that we have to consider. The larger animals are going to build up that toxin, where the smaller animals aren't, and so there's lots of reasons to go a little bit smaller, I do believe, also, and so I'll move on. Vincent, you're up.

MR. BONURA: I had a question to I guess whoever can answer, Michael maybe, about how come we can catch and keep amberjack in April, when we can't even put them on the market?

DR. SCHMIDTKE: From what I know, the commercial fishery is basically put in the same status as the recreational fishery during April, in the sense that you can catch amberjack, and you can keep I think it's the one fish per person per trip, something like that, and it actually is probably in this document, but the commercial fishery and the recreational/charter fishery are both put in kind of the same category for the month of April. Does that help address that?

MR. BONURA: Yes, I guess so. I mean, I was just wondering why we can keep them and couldn't put it on the market, but I would like to see the commercial and the recreational sector be aligned and come down to like a twenty-eight-inch limit, is what I would like to have, and a bunch of fishermen that I have talked to do, and, as far as marketability, I agree with Kerry and Jimmy Hull that the tinier fish are a better fish, and the ciguatera poisoning and worms is far less in those species of fish that are down near the twenty-eight or thirty-two-inch limit there.

MR. HULL: Thank you, Vincent. I think, from my point of view, the retention during the closed season of one animal per person, personally, is to reduce the discards, the dead discards, and because of incidental catch of the animal while you're targeting other species while the season is closed, and for personal consumption, and so I think that's kind of where that one is at. Cameron.

MR. SEBASTIAN: We do everything, headboat and charter and commercial and private charter and all that stuff, and so, for the amberjack, my viewpoint would be, no matter what, the recreational limit absolutely needs to stay twenty-eight and does not need to increase one bit whatsoever. We're already throwing back every American red that we're catching, and we're throwing back every grouper that we're catching for four months out of the year, all the short sea bass and vermilion.

A lot of our customers who aren't as financially well to do, this is their one big fishing trip for the year, and they do, absolutely, without a shadow of a doubt, want to go back and stock their freezers and bring back as much fish as they can, because this is their big splurge to go do something they enjoy, and so, on the recreational side, the size limit does not need to go up at all.

Now, on the commercial limit, I heard some guys talking about, hey, if the numbers are up in the four-million-pound range, would that draw other people into the fray, and quite possibly yes. I mean, I remember, back in the mid-1980s, the late 1980s, and early 1990s, when, man, amberjack was the deal with powerheads. I mean, you could go out and bang out a 2,000-pound day and be back at the dock by 6:00.

If the number is high, then you do run the risk of having a lot of power-headers come back in, and that's fine. The thing with power-heading, which I've done a lot, and it's a super effective, efficient way to do it, but the problem is, when you're shooting for a larger-sized fish, you're going to hit some, and there is no catch-and-release with powerheads, and so dropping that number down, the commercial number down, to a thirty-two-inch sized fish would bode very, very well for the power-headers and the spear fishermen, because that's going to mean that we're not going to make mistakes and be a half-inch short on a fish and have to toss them back, and so that would work out. I think that would work out really, really well.

I would agree with evening out the numbers. Instead of having a very large four-million and dropping to a 2.5 or 2.6-million, having a step-down in a more even fashion might prohibit that, and, I mean, I've had guys talk to me already about, hey, let us use your license -- Let us use your license this summer, and you're not going to be using it anyway, and let's go out and bang jacks, and so, you know, it's a lot to consider and a lot to look at, moving forward.

MR. HULL: Thank you for those great comments, and a lot of us are in multiple fisheries, and I have charter boats, and so I communicate with all the charter boats out of my inlet, and they would agree wholeheartedly do not raise the recreational size limit, because, as you so well commented on, we're throwing back so much now that the customers -- You need something to keep, and, basically, that's the first thing we catch on a six-pack charter. The very first thing we're going to do is go catch our -- It's an important part of that fishery to not hurt the charter industry in any way, too. Very good. Andrew, you're up.

MR. FISH: Unfortunately, I'm a pessimist, and I don't believe the stock assessment, for my area, for a hundred miles north of Cape Canaveral and a hundred miles south of Cape Canaveral. My contacts, and my fishing buddies, aren't seeing anywhere near the catches that we have seen for six or seven years. We are seeing a lot of short recruitment. We're not seeing the legal-size and up, not near as many, and a lot of that that we do catch are eaten by sharks.

As far as the quota goes, I would like to err on the side of safety, and to go up to this almost double our number I think is jumping the gun quite a bit. The smaller fish is a better product, and I think the rec needs to be increased, and it also needs to be closed in April. To allow these recreational fishermen to catch a fish during spawning season I think is ridiculous. Those are my points. Thanks.

MR. HULL: Thank you, Andy. Randy McKinley, you're up.

DR. SCHMIDTKE: Randy, before you start, Andy, when you said the rec needs to be increased, are you referring to the annual catch limit or the size limit, just for note purposes?

MR. FISH: I'm talking about the size limit.

DR. SCHMIDTKE: Okay. Thank you.

MR. HULL: Randy.

MR. MCKINLEY: I just wanted to respond to a couple of the comments. One, I'm agreeing totally with Kerry that we do need the smaller fish, and I totally support that. Bob probably is not aware, and I just wanted to comment on what he was talking about, with the fish not being popular and stuff, but grouper are almost non-existent up in North Carolina. I mean, it's getting worse and worse, and people are demanding more and more fish, and the jack is one fish that is highly sought after, because you make a lot more profit with it.

We were getting close to \$3.00 a pound sometimes for amberjack from the Canadians, and I would hate to do anything to disrupt that, especially considering some of the regulations that is coming against some of these other fish, and so I would like to sort of keep it about the same trip limits, or maybe go up a little bit, but make sure this is something we can harvest, and it's going to be something very important for us, because, I mean, we all do multispecies, and this would be an important part of it, and so it is a very, very important fish for us. That's it.

MR. HULL: Thank you for those good comments. Richie Gomez, you're up. Richie, are you there? Put your hand back up when you can, and we'll come back to you. Thanks. Robert Lorenz.

MR. LORENZ: Jimmy, thank you. Just a quick one, and more in a logic way. Hearing everybody speak about the value to the fishery of smaller fish to be available, I just want to possibly put one plug on the record, if I had a biologist to ask, to consider that, since the fishery is pretty healthy, lowering the size limit, particularly for the commercial, and if you left it the same for the recreational, may not be the worst thing in the world, because I would also ask if it's possible -- If we actually get a better market value from those smaller fish, but, also, if you fill up your trip limit with some smaller fish, then you're probably letting go, eventually, some larger fish, and then I would ask the biologists about the fecundity of these fish. Putting maybe less pressure on trying to get larger fish, would that not kind of become a wash in the stock in the future, because these larger fish would be more available to breed? I just wanted to add that to the logic mix, and I would feel a little better if the size limit is decreased.

MR. HULL: Thank you. Mike, you're up.

DR. SCHMIDTKE: Thanks, Jimmy, and I was just going to kind of throw out there -- So I have definitely heard some pretty consistent thought of wanting to have some form of a constant limit throughout the time series, and that may be something that the Science Center projects as a constant limit, or setting it in some form from like a middle or lower number within this group, and so, I mean, that's one note, one takeaway, that I have from this, and then we have -- There is still the discussion to have about the allocation that we haven't gotten to, and I just wanted to note for people, as they're giving their comments, we do still have one more action that is addressing allocation for this fishery.

MR. HULL: Thank you for that reminder, Mike. I was thinking the same thing, and so there's two more commenters up here, and let's draw the line there after Richard, and then let's make a decision here on do we want to recommend to the council, from what we discussed, changing this preferred alternative, and do we prefer that, or do we prefer the other alternatives that they already have, or do we want to make another alternative, as we discussed, perhaps a median across all of the years, up to 2027, rather than the big bump, and so let's finish it out here, guys. Let's finish it out. James, you're up.

MR. PASKIEWICZ: Thanks, Jimmy. Just, as we proceed here through the rest of this section here, I just want everybody to keep in mind, when we're talking about the size limit of amberjacks, that, at twenty-eight inches, that they're still only at 50 percent reproductive maturity, and, as we move up from that to thirty-two, we're getting closer to 75, and I think, at thirty-seven inches, we're getting close to 100 percent, and so some of the size limits that are in place might have led to the stock being as abundant as it is, and so we need to be very careful when we're talking about an overall decrease in the size limit for one sector or another.

I mean, I don't think we're going to go below twenty-eight inches, but I would just like everybody to really keep that in the back of their head, about the reproductive maturity of this fish, and let's not get overly aggressive here, and maybe a mean size limit of thirty-two inches be a consideration, and I just want to make sure that these fish are having the opportunity to reproduce, is all. Thank you.

MR. HULL: Okay. We're going to get a chance to talk about size limit after we get done with making some advice to the council on this action. If your comment isn't about this action right now, save it. This is about the annual catch limit and the optimum yield, and what do we want to recommend to the AP? Do we want one of the alternatives that they have given us, or do we want to give them another alternative? Richard, what have you got?

MR. GOMEZ: Everything pretty much has been covered, but I just wanted to comment on the gentleman that said possibly not being able to catch amberjack in April in the charter industry or the recreational, and so, for us in the charter industry, we would love to be able to go out there and catch those big dolphin that we used to catch every single year at that time, which would put a lot less pressure on those amberjacks, but, unfortunately, due to different causes, and one of them being the commercial industry, that doesn't happen as much as it used to, and so I just wanted to throw that out there, that these fishermen come to Key West to get meat, and it's important we supply that meat, and, unfortunately, circumstances push us into that amberjack industry.

Then one other gentleman commented on possibly the charter boat industry only having one amberjack per boat per day, and, I mean, I would think that would limit us, as far as getting that meat to our charters, and so we may be able to wrap our hands around something else in the future, maybe something less, but I don't think the Florida Keys fishermen would ever, the charter boat industry would ever, want to be limited to one amberjack per boat per day, and that's it for me.

MR. HULL: Rusty.

MR. HUDSON: Thank you, Jimmy. This MRIP-FES stuff that's considered a new currency compared to the old MRFSS, that would basically signify, to me, that the recreational ACL is much higher now, based on that MRIP work, but that does not affect, and it has not been transferred at all, to any benefit for the commercial. Did it make a change in the percentages on the allocation, or did they -- I guess they implemented the MRIP-FES numbers, and I wasn't part of that stock assessment, Mike. Thank you.

MR. HULL: Rusty, we're going to get to allocation in this document. I don't know, Mike, if you want to answer that now, but I figure that we'll be getting into that, and that would be probably a better question there. James, go ahead.



DR. SCHMIDTKE: That's something that we can address with this, because it does -- I mean, it does affect the total ACL, and so what Rusty was talking about -- That 1.968 million number, the number that's currently in place, that is based on MRFSS currency, if you will, and not the MRIP-FES currency, and so we would be moving to a new number and a new currency, which would be the total number, the FES numbers, that are being considered in Alternatives 2, 3, and 4, and so that is a good point to bring up, that it's not just a change in the number in the same currency, but it's a change in the number and a switch in currency, where the FES more or less has said that a lot of these recreational catches estimated in the past are double what we thought they were, give or take by species, but that's about how it plays out on the large scale.

MR. HULL: Does that do it for you, Rusty?

MR. HUDSON: Yes, and, basically, it confirms that I felt, that the recreational has grown, based on these new currency or new inputs, and the commercial allocation, by percentage, will be reduced, but, because all of this went into the stock assessment, the overall annual catch limit for both sectors added together is much larger than it had been in the past, and so I think it allows for some change in this management, and so that's all I was wanting to let the recreational know. They got a lot more fish, based on stuff, and commercial get more because the overall stock is bigger, but our percentage is lower now, and I believe that would be right.

DR. SCHMIDTKE: The percentage gets into that next option with the allocation -- What the allocation would be moving into the future, and the allocation hasn't -- It didn't automatically change with the change to the new FES currency, and so that's -- All of these are steps that are being taken in this amendment to aid in that changeover, both from the ACL and the allocation perspectives.

MR. HUDSON: But, on allocation for the next few years, commercial actually is benefitting from the results of this positive stock assessment, and so are the recreational, and so it gives us some wiggle room to make some adjustments to everybody's fishing behavior, so that they can benefit from the stock assessment, but not go way high and then go way low, like is going to happen in the commercial. Thank you.

MR. HULL: Thank you, Rusty. Thank you, Mike. James, you're up.

MR. PASKIEWICZ: Thanks, Jimmy. **Well, what I would like the council to consider, as an alternate recommendation, would be to have the ACL at 2.8 million pounds through the year 2026-2027, and I think that's the timeframe we're looking at here, and I know this isn't the place for it, but have a 50/50 split between the two sectors.**

MR. HULL: Okay, and so are you making a motion that we would like to recommend that we have a consistent total ACL across the years that are projected head, from 2022 through 2027, and then we could address your other part during that action?

MR. PASKIEWICZ: That is correct, Jimmy.

MR. HULL: Okay, AP. You have heard -- We have a motion from James that would recommend that the council have an alternative in Action 1 for a 2.8-million-pound total ACL across the projected years. Does something like that work, Mike?

DR. SCHMIDTKE: Does that motion kind of capture it?

MR. PASKIEWICZ: Yes, absolutely, and, in the description, with some of these alternatives, I mean, maybe we can add in here that this -- I mean, this is a much more conservative approach, and I think that it benefits both sectors, and we're not going to open the door for extra people to get in the fishery and then be snuffed out, like Bob Lorenz said. I mean, there's a lot of points here that we discussed, and so, I mean, I don't know how the verbiage is going to be, but there's a lot here and that we're taking a very conservative approach to a positive stock assessment. Thanks.

MR. HULL: That's a good statement. It benefits both sectors. Do we have a second for this? It's kind of hard to do it this way with the screen, because there is already names up there.

MR. FISH: I will second it.

MR. HULL: Okay. We've got a second by Andy, and so now -- We've had a lot of discussion, and so let's just zero-in on the motion at-hand, AP. I will read it, and we'll have a vote.

DR. SCHMIDTKE: I'm sorry to interrupt, but I do want to make sure that, as the AP considers this motion, that it kind of has, I guess, the best idea possible of how this plays out in a recreational and commercial ACL scenario, how it breaks down, and so would you mind if I just introduced the Action 2 alternatives and you guys can see kind of what those numbers look like, and I can point out one that's kind of close to that 2.8-million-pound one, just to make sure that people are seeing that this is how it plays out for my sector.

MR. HULL: Of course.

DR. SCHMIDTKE: All right, and so we'll come back to this motion, and I'm just going to scroll down to these Action 2 alternatives. Right now, Alternative 1 is the current allocation, which is that 40.66 and 59.34 to the commercial and recreational, respectively. The numbers that are shown here include the preferred alternative, but, just kind of ballparking how it plays out with that 2.8-million-pound figure that's been put on the table, this 2024 through 2025 projected year, this is kind of how it could break down, with 2.8 million pounds there, with the commercial, in this allocation scenario, receiving about 1.1 million pounds, and that is -- One thing to note is that, the commercial ACLs that are shown here, they have been converted, and so you allocate in whole weight, and then, after that, we convert from the whole weight to the gutted weight, because that's how the commercial fishery is regulated, and so these are in pounds gutted weight, and the recreational ACL would be looking at about 1.67 million pounds whole weight.

The second alternative scenario is 29.85 percent to the commercial fishery and 70.15 percent to the recreational fishery, and, again, trying to ballpark, looking at that 2024 through 2025 projection year, and that's how it breaks down, with about 800,000 pounds going to the commercial, gutted weight, and about 1.976 going to the recreational. These allocation figures came about by using the same -- By taking the FES and plugging it into the same allocation equation that was used to come up with the current allocations, when the MRFFS data was plugged in, and so, if you replace that recreational data and plug it into the same years that were used, that's what it comes out to, is that approximately 30/70 commercial/recreational split.

Then, finally, the third allocation alternative being considered right now is kind of a midpoint between those two, 35 percent to the commercial and 65 percent to the recreational, and that 2024 year would show approximately how that would play out. 950,000, about, to the commercial and about 1.8 million to the recreational, and so I just wanted to point that out in numbers, so people are aware that that's what this looks like numerically, before a vote or something like that is taken.

MR. HULL: Okay, Mike. That's helpful. It's interesting that the proposed motion of 2.8 does fit right in the median, in the middle of all of those alternatives in Action 2, and so, with that information, AP, if you get a chance to look at those -- I don't know if you have a printout on it, but we're back to the motion, but you have the no action, and you have the Alternative 2, which changes all these sector allocations.

The no action doesn't change the allocation, but it gives us that reduction in long-term use of the ACL, and everybody is pretty much status quo on where they are, and then the others change it, but still having the long-term, but quite a reduction in commercial ACL, as you choose these other options, and recreational, and we do have a healthy fishery, according to the science, and so back to our motion. It has been seconded, and you can look at the sector allocations when you use that, and so is there discussion on the motion, with that information there, and you may want to -- Were you recommending, Mike, that we possibly put into the same motion here or wait until Action 2 to put another motion there?

DR. SCHMIDTKE: I think it would be cleaner to wait on the allocation that I think it was James proposed, the 50/50 allocation, and so wait on that and put that below Action 2, and just consider the total ACL at this point, but I just wanted to make sure, because I know that the way this plays out and affects people is on more of a sector basis, and so making sure people have those new numbers to look at when making a decision regarding this motion.

MR. HULL: Yes, sir. Okay. To the motion, is there comment? Randy McKinley, you're up.

MR. MCKINLEY: What he just presented there changes everything, even our motion, because, if this goes through, and then they revise the sector allocations, that's not going to be very helpful for us at all, and so it's very much tied together, and, I mean, I would have even been more conservative. Instead of doing the 2.8 million pounds, I would have rather us only gone up maybe 10 or 15 percent from that it is currently, and it would definitely be more conservative, but, if they throw in a sector allocation, then I wouldn't be for that, and so this is -- They are both intertwined, very much so.

MR. HULL: Well, I think that's why Mike pointed out that we need to look at this.

MR. MCKINLEY: I just think that we need to be careful, before jumping in and making these motions and doing this, until we see everything. I mean, that's just what I would feel.

MR. HULL: Okay. Well, we could -- If it's doable, and we'll hear from others, if they're still online here, and maybe we want to wait until we go all completely through the allocation, Action 2, before we make a vote on that, if we can do it. Anything else, Randy, right now?

MR. MCKINLEY: No, that's it.

MR. HULL: Thank you. Harry, you're up.

MR. MORALES: Well, this is a lot more livelier conversation than I expected we would have, but, then again, we are talking about an actual positive, and it's encouraging to see the concern about us setting ourselves up for disaster down the road, and so the 2.8, or some level above, for me is fine. I believe that there are several things that have already come out of this conversation. One, perhaps the AP recommending that the fishery be closed in April, if that's the spawning season, and we should want to encourage further recruitment of this fishery.

We've also heard, very strongly, about the reduction from the thirty-six-inch to something other than thirty-six, whether it be thirty-two or thirty-three, and I believe that any recommendation that we make should be all-inclusive, and you trade the thirty-six for thirty-three by accepting a more conservative increase in the annual catch limit. This gives us a chance, over the next five years, to see if our collected recommendation actually works to keep a fishery going, keeping a marketplace going, and not having fish prices go up and down like a yo-yo, and so those are my comments that I believe our recommendations have to include.

MR. HULL: Thank you, Harry. James, you're up.

MR. PASKIEWICZ: Mike, I wanted to thank you for your input there. It kind of was a little bit eye-opening. Can you scroll up to the no action provision and let me see what that is? It's basically a 60/40 split, with the projections, and would it be possible here for me to change my motion and say we would like it to be -- We would recommend Alternative 1, with a mean ACL of 2.8 million pounds, and is that something that's possible? Instead of completing adding a new action, just ask them to consider Alternative 1 with a mean of 2.8 million pounds.

DR. SCHMIDTKE: So consider Alternative 1 of Action 2 or Alternative 1 of Action 1, this one up here?

MR. PASKIEWICZ: Of Action 1. So the Alternative 2 of Action 1, but with a mean of 2.8 million pounds.

DR. SCHMIDTKE: I guess I'm not understanding, just yet, what the 2.8 million -- Like how that -- So the 2.8 million would be --

MR. PASKIEWICZ: Actually, go back down to Action 2. I'm sorry.

DR. SCHMIDTKE: Because those numbers would be the limit.

MR. PASKIEWICZ: Right, and so, no action, you would have a 60/40 split, but, instead of -- You know, instead of having a 4.4-million-pound ACL in 2022 and 2023, we would like to adopt this alternative with a mean of 2.8 million pounds.

DR. SCHMIDTKE: So what I think I'm hearing is you would -- I guess what this motion -- As it is, what it would do would be making this column all 2.8 million.

MR. PASKIEWICZ: Yes, and it closes the door on the sector allocation issue that we're going to face moving forward, because now we would be asking for a completely different split, but we

already have a defined split in this action, but taking a more conservative approach on the total ACL over the five-year period. Does that make sense?

DR. SCHMIDTKE: I think so. I'm just trying to make sure I understand it. So, this total ACL column, we would be changing all of these numbers to be 2.8 million?

MR. PASKIEWICZ: Essentially.

DR. SCHMIDTKE: Then they would be multiplied by these percentages to come up with our commercial and our recreational ACL, and so, I mean, it would be -- On an approximate basis, everything, all these years, would look like 2024/2025.

MR. PASKIEWICZ: Yes, which would be an as-is split, with a conservative ACL, and we wouldn't see that jump initially and get ourselves in hot water with overfishing, but we would also see that nice increase, a nice positive gesture, saying, hey, we can go out and catch a few more of these fish, and the recreational and commercial is split the same way as it's always been, and just get on with our lives.

DR. SCHMIDTKE: Okay, and so that would be kind of a combined Action 1 and Action 2 recommendation, which, if that's the way you all want to phrase it and vote on it, then that's fine. That's totally up to you, and we can change -- It's your motion, James, and so you can change it how you please, as far as I know.

MR. PASKIEWICZ: I just don't want to get into a situation where the sector allocation becomes something that doesn't resemble what it had been in the past. I mean, I think that people are accustomed to catching X amount of an ACL, and change is not always good for everybody, in the way their brains function, and I think that it might help us eliminate a lot of discussion on this particular matter.

DR. SCHMIDTKE: Does that capture it?

MS. BROUWER: Just a suggestion. You could maybe, just in parentheses, indicate that Alternative 1 would maintain the current sector allocations.

MR. PASKIEWICZ: I like that.

MR. HULL: Okay, and so we would need to continue -- **Do we have a second to James' edited motion, and we have a new motion here that the council consider an additional alternative of a consistent 2.8-million-pound total ACL and a preferred alternative of Action 2, Alternative 1 to maintain the current sector allocation.** I suppose we need a new second. Does anybody second this? Just speak up.

MR. MCKINLEY: I would second it.

MR. HULL: Randy McKinley seconds it.

UNIDENTIFIED: Jimmy, can we get a vote on this, because I don't think everyone is in agreement on the 2.8 million.

MR. HULL: Yes, we're going to have a vote. We just had to have a second for -- I think -- Myra and Mike can correct me, but I think there is probably some more discussion that they want to talk about this before they vote on it. There is questions here, and so we're not ready to vote yet, I don't believe. It looks like the next hand up is Richard.

MR. BRAME: I hate to confuse the issue, but, if you're moving forward using these new FES data, under Action 2, Alternative 2 is actually status quo, because you're using a new currency, and so that would keep everybody, under the new currency, at the same level, even though the percentages change. If you keep the same percentages, you are disadvantaging the recreational fishery and advantaging the commercial fishery.

MR. HULL: Okay, and so that would be the question. If this motion -- I think, currently, the commercial is 1.1 million, and so this would raise it to 1.1. It would basically stay the same, from what I can see, but the recreational -- I don't know -- Right now, they're at 1.67, I think, whole weight. I don't know what this would do to them. I don't see that. This is strictly on the commercial charting here, and I don't know what it would do, as you're saying it would disadvantage them. Mike, do we have a -- What would do this do to the current recreational ACL whole weight quota?

DR. SCHMIDTKE: I apologize that this presentation has gotten a little bit disjointed, and I probably should have gone through all of Action 1 and all of Action 2 first, before we got to the place of making motions, because they're intertwined here. If it would be okay with you, Jimmy, I could show some of the preliminary analyses that Chip did, catch projections based off of recent harvest, and that may help.

MR. HULL: Yes, I think it would, because it does -- Dick Brame is raising that issue of what does it do there, and now I see it, and I do have a printout here, and I flipped the page, and I see that other chart, and so, yes, please proceed on, and let's come back, because this is real important.

DR. SCHMIDTKE: Okay. I've kind of gone through those Action 2 alternatives, and so we don't have to rehash all of those, but, just looking at some of the analyses that have been done, first, for the commercial fishery, this is what commercial landings have looked like against the ACL that's been in place in recent years, as well as as a percentage, noting closures that occurred in the 2015, 2016, and 2017 seasons.

Then, looking a bit further down here, at Figure 2, we have the predicted monthly landings of amberjack for the commercial fishery, and this is how they look, how they have played out, in recent years.

These projections are based off of past landings, when that time period was open to the fishery. Taking into account those catch trends, we had analyses of kind of the extreme cases of those alternatives that are presented, and so the 2022 through 2023 years is the highest, the largest, catch scenario, and 2026 through 2027 is the lowest catch scenario, and the numbers in the projections would be somewhere in between for those, and we also have kind of the most extreme cases of allocation, where the highest commercial allocation being considered right now is this 40.66 number. That's the current commercial allocation. The lowest is 29.85 percent, and that is the

allocation if you plug in the MRIP-FES numbers and use the same equation that, under previous data, came up with that 40.66 percentage.

What you see coming out of this is, if you set the ACL based off of those scenarios, then there is no projected closure for the commercial fishery, and you see the 95 percent confidence interval around those no-closure dates, but this just means that it was able to persist all the way through under that limit, through the end of February, and so the -- One thing to keep in mind is the split season is not factored into this analysis, because the years when the fishery was operating that went into this analysis did not have the split season, and that was just put in last year, and, at least by intent, that is intended to extend the season throughout the year.

From the recreational side, we see the landings, based on the MRIP-FES survey, and we don't have those compared to the ACL, because the ACL was developed in a different currency, but this is what some of the landings have looked like over the last five years, or the most recent five years of data that we have. Using information from past landings to predict future landings, this is kind of what it looks like on a wave-by-wave basis, and there were two predictions for the recreational fishery. One was based off of a three-year average, and one was based off of a five-year average.

The three-year average used the most recent three years within a given wave, and so, for example, for Wave -- It's the second wave within this figure, but it's Wave 3, the May/June wave, and the three-year average would have been based on 2018 through 2019 and 2017 through 2018, because the fishery was open during that time period.

During the years when there were closures, such as looking -- Kind of in this Wave 1, this January/February wave, where there were closures in place, if a closure was in place during that wave, then that year was skipped, and it went back further, back to the next year, when that wave was open, and so all of these predictions are based on the wave being open the entire time, and we have, again, the three most recent years' worth of waves, and then we have an average of the five most recent years' worth of waves.

One thing to notice, for the recreational fishery, is that we have -- Particularly, the 2016/2017 year was very high earlier in the season, in Waves 3 and 4, and so that affected -- I mean, that ended up in a closure, and that affects what these look like, because that year is included in the five-year average, and it is not included in the three-year average, and so that leads to kind of some different considerations when we get to the actual predictions of closure.

Again, we're going with the most extreme scenarios, highest and lowest allocation, highest and lowest ACL, from those projections, and we see, from the three-year average, that no closure is predicted, but, when you include that higher year, going back further in the time series, then you start getting into, with the five-year, by the end of that step-down process for the ACLs, then there are recreational closures that may be predicted, and so, in the scenario where you have the lowest recreational allocation, 59.34 percent, based on a five-year average, that's looking at a closure date estimated at September 20, and, when you're looking at the highest allocation, the 70 percent, based on the five-year average, by the end of that step-down process, you're looking at a closure of January 30.

Now, like I said before, with the commercial, the numbers in between that step-down -- You see the first year, in both of those processes, there is no closure, and so it would be in between that no-

closure scenario and that final end of the step-down, where all the rest of that would kind of fall in that process. That is the information that we have at this point concerning predictions of future landings and how these different scenarios can play out, potentially. That is all the information for Action 2.

Action 3 in this amendment is not really related to the other two, and, again, that's one that is applied -- It's more of a procedural thing for the entire FMP, and so we can keep the focus on amberjack at this point. That's all of the amberjack information, I believe, that was included. This last page, just for reference, is a summary of current measures, and these are not proposed changes, but this is what's in place right now, and so, if you're following along within the document, we've talked about a lot of these different things with the different size limits, the split season, the bag limits, all of that, and so you can reference that, if you need to, and see where we are right now. I will scroll back up to the motion, unless people have questions and want to see something else.

MR. HULL: Thanks, Mike. I do see a hand raised, but, before I go there, I mean, just for me, there's an awful lot here in these two actions to consider, and I'm kind of in a position of -- I guess you would call it the paralysis of analysis. There's just so much here to consider that it's really -- Maybe there is another recommendation we can make that we want the fishery -- How we want the fishery to look between the sectors that we can come to a consensus on, but, in the meantime, Chris, you're up.

MR. KIMREY: I would like to go back to Dick's comment, and I think he was trying to answer a question that I had, but didn't know how to ask. On the recreational side, with the MRIP-FES data, are we going before that and using the previous recreational data and FES to come up with these projections? I think that's what he was trying to hit on, but I don't know if I completely understood the difference, and I don't know if there's somebody that can answer that or tell me I'm asking the wrong question, because what it sounded like, to me, when Dick commented, was that it shows more of a consumption on the recreational side, with the FES data. Prior to that, the numbers were incorrect, and is that what I was hearing?

DR. SCHMIDTKE: The projections that I just showed you, those use the recreational FES data, and so that's everything that is in this document showing recreational catches, all FES data, and that's what is going to be used going forward, and so the projections there would correlate to what we would kind of expect to see moving forward.

Concerning the allocations, we do have one alternative, one allocation alternative, and these percentages were derived from the MRFSS data and not the FES. The Alternative 2, this applies the same equation that was used to get Alternative 1, but with the FES data, and, really, the allocation question -- The allocations can be derived using this alternative, or, if you all -- If the council -- If there is a desire for the fishery to look like anything different than this, it doesn't necessarily need to be this equation, and it can be set at a percentage.

For example, Alternative 3 is a 35 percent and 65 percent -- This is essentially just a midpoint, to give an additional alternative and give some midpoint consideration to something else, but it's not based on heavy, heavy data analysis. It does kind of fall out to a ten-year -- A recent ten-year average of what the fishery looks like, but that's more coincidence than anything, but there's nothing tying an allocation and requiring it to be based on the same equation that it was based on before. It's what do you all and the council want the fishery to look like in the future.



MR. KIMREY: Can I chime in? I guess what I'm saying is it would seem a bit hasty, to me, if you have two different currencies, if you will, and they're seemingly showing good things for the amberjack, which is great, but to use two different currencies to come up with these percentages - It seems a little hasty to do it that way, and so I guess, because I don't understand it well enough, it's hard for me to make a decision, one way or another, how I may or may not feel about some of these changes, and I feel like Dick probably understands this way better than I do, and I see that he's next, and so will move along and let his question go.

MR. HULL: Dick, you're up.

MR. BRAME: The point I was trying to make is this is a simple arithmetic exercise. If you use the FES data, you change the stock size, and, if you want to keep your allocation the same as you had before, you do what you've done in Alternative 2, which is use the same method of figuring the allocation with the new FES data, and that's what comes out. My point is Alternative 2 is actually status quo, in terms of catch, using the new currency.

MR. HULL: Okay, and so that's a good way to -- So you're saying Alternative 2 is basically status quo, if you look at the output numbers for both sectors, correct?

MR. BRAME: Yes, and the FES data is what gave you more fish, and so, as you apply the allocation formula you used actually in Alternative 1, which was using MRFSS data, that's what falls out, and you end up -- It appears to give a lot more of the recreational fishery, but that's what they have been catching through time, using the new currency, and so it's actually status quo.

MR. KIMREY: That cleared it up for me. Thanks, Dick.

MR. HULL: I see -- Is that it so far, Dick? Can I move on to Rusty?

MR. BRAME: Yes.

MR. HULL: Rusty, you're up.

MR. HUDSON: Dick is right. In the scheme of things, with the FES, it changes the percentages down to the 70/30 on that action, but the commercial numbers all remain the same that went into the stock assessment, and none of that changed, because of the census situation, but the MRIP-FES is an estimate of an estimate under the new way of doing stuff, with the mail versus the old landline, and so, like I say, these estimates, we'll see in the future how they play out, but, again, until we get a census on some portion of the recreational, whether it's for-hire or across-the-board or private, in part, there's a whole lot of wrestling match that goes on, and I see in shark, and I see it in the king mackerel, and a lot of people get caught up in those percentage changes. Thank you.

MR. HULL: Thank you, Rusty. I mean, I have a lot of questions about the methodology on it, and I understand that it raised the total biomass, simply because it says that the recreational sector harvested more animals, and there was more animals there to harvest, blah, blah, blah, but the commercial sector was catching that it was catching based upon logbook landings and things like that, whereas the FES is a lot more assumptions, but, anyway, James, you're up.

MR. PASKIEWICZ: I guess, trying to make black and white out of a lot of gray is a little bit beyond my scope of what I'm able to do here, and, really, I was trying to simplify a situation that looked to be very complicated, while still benefiting both sectors, and, I mean, I'm apt to withdraw my motion here completely, with the confusion of the data, and I'm kind of with you about the paralysis by analysis here. You know, it seems to me that we're trying to represent everybody's greater interest, and now, with this discussion, I'm not exactly sure where I stand, and so somebody is going to have to help get some clarity on this, for me, just because now it just doesn't look very precise.

MR. HULL: Okay, and, yes, that may be something that you want to do, and I think that kind of what you're trying to portray to the council, and I think everybody else on the AP, from what I have heard, is that nobody needs to be hurt here, and we need to be -- Everybody needs to benefit from what the science is showing as a really healthy stock, and the new analysis shows that there is more animals available, and then we want to be conserve also and not harm the fishery, and we want to have sustainable fisheries that don't close, but we want to be fair, because who knows what's going to -- If you change these allocations now, and then, in the future, the stock assessment goes south, now where are we at, and so now we've got lots of different things going on, and so, yes, it's a tough one.

MR. PASKIEWICZ: We haven't even discussed accountability measures yet on this, and so here we go.

MR. HULL: Yes, but, I mean, maybe it's something that we want to make a recommendation that the AP just wants the council to -- Because they're going to be in the same position we are right now, and they want to be fair to everyone, and these allocation discussions are really, really tough, because they have consequences in the future, and everybody is used to being where they're at, and, if there's more fish coming, it needs to be spread equally, and people need to benefit equally, and then there's the accountability measures, and how do you count who is catching what in each sector, and on and on and on. Is that something that you want to do, James? Do you want to pull your motion at this time, and maybe come up with something different between all of us?

MR. PASKIEWICZ: You know what, Jimmy? Honestly, I think that I would like to see how this flies. I mean, I think it's very simple, and it's -- Let's see. If it gets tabled, it gets tabled, and, I mean, maybe we'll find out where the panel is as a whole by putting this to vote. Otherwise, it would be a good bit of wasted time and discussion here, and so let's see what happens.

MR. HULL: All right. What I hear from you is let's take a vote, and that will finish this, and we can move a little bit further. If this isn't what we want, then it's going to go down. Is that okay, Mike?

DR. SCHMIDTKE: Yes, that's fine. We can go about it that way. We'll see how the vote goes. I do have, I guess, a suggestion of how we could potentially capture ideas, maybe a bit more cohesively, but we can do the vote, and then we can go into something like that.

MR. HULL: Thank you. Okay. Here we go, guys. I want you to please clear your name off the raised hands, so that we can do this and I can tell where we're at. **All of those that are in opposition to this motion, please raise your hand.** Okay. **Anybody else in opposition to this motion? Going once.** Okay. **I'm counting five AP members in opposition, which means the**

**others support it, because that's it, guys.** You don't get to raise your hand for support. It's you're in opposition to it. **Five, and so I don't know the total number, but I think we had fifteen AP members in attendance.**

DR. SCHMIDTKE: Jimmy, just for the sake of the count, I see Rusty's hand up right now, as far as I can tell, in opposition. If you would like to do a clear hands.

MR. HUDSON: Abstain is another category that we could have asked. Thank you.

DR. SCHMIDTKE: Okay, and so not in opposition, but just pointing out the abstention, and I think it might be easier to just -- I can clear the hands, and we can do another hand-raise process in support.

MR. HULL: Thank you. Okay. Let's do that. Then we'll do the abstentions also, possibly, after that. **All those in favor of the motion before you, raise your hand. I think we've got the end of that vote, and I count eight in favor.** Should we do an abstain, Mike?

DR. SCHMIDTKE: Yes.

MR. HULL: Okay, and so if we clear the board. **All those abstaining, please raise your hand. It looks like we have four abstaining.** Back to you, Mike.

DR. SCHMIDTKE: Okay, and so we have eight in favor, and so that would be a motion approval.

MR. HULL: Yes, sir.

DR. SCHMIDTKE: I guess what I was suggesting, because we've heard quite a few suggestions, recommendations, beyond this, and we have kind of this recommendation, but we could also try to come up with a final list of what are these other recommendations, and we're at a point now where I think we can come back to some of those size limit discussions and try to get a list here. We do need to be time conscious, because we're a bit long on amberjack, and we probably want to get to yellowtail before lunch, and so it might be good to get to a list of these items for amberjack.

MR. HULL: So maybe we're looking for a possible motion from someone to list some of these important ideas and recommendations that you have heard from the AP, just as a general recommendation to the council that, hey, these are something that we would like for you to consider, something like that.

DR. SCHMIDTKE: We don't need it in a motion, initially. I guess I would recommend let's make the list, and then we can do a collective motion at the end.

MR. HULL: Okay, AP. You hear that? Some of the points that we all have made, we would like to list them and try to be concise. Size limit is a good start, and like, if you're in favor of the size limit decrease for the commercial, say, yes, to bring the commercial size limit down, for all the reasons that we've already talked about, and I don't think we need to go into all the reasons that we've heard, because we heard them, and Mike is putting some more stuff up there, which is good. That gets us started. Jack, you're up.

MR. COX: Jimmy, one thing that we seem to be consistent on, between all the members here, is that we all kind of like to keep the consistency of the allocation split, of the 60/40, which, if I'm hearing right, it seems to work for everybody. I do like that. On the commercial side, and, now, I'm speaking for North Carolina, and I don't want to step on any toes for the other southern parts of the state here, but I think what we would like to see, based on the outcome of this assessment, is that we would like to see a decrease in the size limit, to maybe get us -- You know, just a couple of inches gives us a lot more fish and a lot less discarding, and, back to what Kerry was saying, and you, Jimmy, about the worms in the fish, and we actually do see a lot less worms in those smaller fish, and so I want to be on record of supporting that measure as well, which is much more marketable.

A thirty-four-inch size limit is something that I see that would make a big difference in our catch here, because we discard a lot of thirty-five and thirty-four-inch fish, and it would make a big difference in our catch. I will say this, that we're going to catch fish a lot faster, even if we only go down a couple of inches in our size, and so it may potentially push us to catch our ACL a lot faster, even if we only go down, like I said, a few inches, and so we want to keep that in mind, but the most important is that we are able to have a 1,200-pound ACL on both sides of the trip, at the beginning of the season and the latter part of the season, and that we don't get close to our ACL. We want to stay within the boundaries, and we don't want to have a closed season, which is super important, and I don't really know how that would read in what we have now to look at, and I think some of the recommendations would have to change.

In North Carolina, we don't have a huge market for amberjacks. I mean, it's kind of limited. It's not like our grouper fishery, or snapper or b-liners, where we can just sell every ounce that we can get our hands on, and it can be a market that gets too many fish on it, at times, and so we want to be careful that we don't bump our ACL up so high that we just go out there and bang away at it and we lose our price that we're getting.

Right now, we really have a nice price, and we don't want to see our money drop just because we've got too many fish on the market, and so those are my comments, is that we -- I think the 1,200 pounds, the increase of 200 pounds a trip limit on the second side, a thirty-four-inch -- A decrease in that size limit, just by a few inches, and to make sure that we don't go over our ACL and that we stay pretty consistent on the allocation. Thank you.

DR. SCHMIDTKE: Jimmy, just to try to help in moving the process, time-wise, I think we've heard a lot of support regarding decreasing the commercial size limit, and that's something that would need to be kind of an added action, and so we would probably -- If people have different levels of alternatives that they would suggest for that, then that might be a good thing to have thrown out, and we can kind of list some of the alternatives suggested here, but we don't need -- Unless the AP wants to -- If you all want to decide on like a final single suggestion, great, but, if not, we could also just do it as a list of these are things that could be considered under that option.

MR. HULL: So we'll just continue on with the comments here, and, if someone wants to put a certain size limit there, you will just add it to this document right now?

DR. SCHMIDTKE: Yes, and I'll just kind of list them out.

MR. HULL: Right on. Okay. Vincent, you're up.

MR. BONURA: Thank you, Jimmy. I would just like to add that I would recommend to the council to put a commercial and recreational of twenty-eight or thirty inches, and, also, I would recommend to have a full closure in April on both commercial and recreational, and then I would back up Jack Cox at the 1,200 on the commercial Season 2.

MR. HULL: Okay. Let's give him a second to get that up there. It looks like you've got it. James, you're up.

MS. CHAYA: It looks like he went offline. I can keep him on the list and move on, and I will make sure to unmute him when he comes back.

MR. HULL: Yes, and he told me that he was falling off. Okay. Randy McKinley, you're up.

MR. MCKINLEY: Just real quick, for time, I do agree with Jack, but I'm more toward Vincent, and I would like to see it maybe closer to thirty inches, but, for our purposes here today, it would be best -- We could argue all day about a couple of inches, and just make it known that we need to lower the size limit.

MR. HULL: I agree. Thank you. Bob Lorenz, you're up.

MR. LORENZ: Thank you, Jimmy. Some of the paralysis I have -- I would like to ask if one thing might be able to be done, and it may help the council, but is there an ability to have a feasibility analysis? When I look at Action 2, with my knowledge, it's hard for me, but I see that those moving allocations, higher and going lower with time -- I just have a gut feeling that it's good science, but buried in it could be bad economics.

Simply, to me, it looks like there could be some dangers, in the early years, of too many people entering the fishery, which we've said before, and then the rug being pulled out, because that could hurt the commercial fishery, and, in later years, it looks to me like it would end up hitting the recreational industry and the for-hire folks harder. I just have trouble wrapping my arms around all that, from the way that Action 2 is, and I just don't quite understand how it's really going to work for everybody, and I would love to have a better explanation from people capable of providing one. Thank you.

MR. HULL: This is early in, and so there's going to be a lot more talk on all of this. Cameron, you're up.

MR. SEBASTIAN: I would definitely concur with -- The reality of it is, hey, everybody wants to drop down the commercial size, and the reality is the council is not going to drop six inches on a fish. It's not going to happen, and so the thirty-four-inch on a commercial size I think would be a reasonable drop, and you get more fish in the boat commercially, and you can make your trip shorter and get your numbers up, especially if they go to the 1,200-pound limit.

Trying to merge the two numbers together is exceedingly detrimental to the recreational -- You need to stay at twenty-eight recreational, and closing it in April would be a catastrophe, because then, literally, we would be able to catch no larger-sized fish, and we would be limited to black sea bass, vermilion, and some snapper, stuff like that, but nobody could put any larger fish on the

boat, and so that would crash the recreational side of it, if we had any closure in April of another large species of fish.

MR. HULL: Mike, I think you heard there that we have a different thought on the recreational other than that one bullet point there of consider the size limit. You didn't have it, but where they were both the same size, and he definitely doesn't want to see an increase in the recreational size limit, but leave it at twenty-eight.

DR. SCHMIDTKE: Okay, and so I feel like -- You can correct it, if it's accurately captured right here, in having the recreational size limit twenty-eight inches, leaving it where it is, and that's one of the options.

MR. HULL: Yes, and that's really important to the charter boat sector, I know, and the private rec fleet, too. Cameron.

MR. SEBASTIAN: So I would say, where it says to consider full closure of both, I mean, I would be in definite opposition of that statement, for sure.

DR. SCHMIDTKE: I will just mark it as not unanimous at this point, and, if we want to have -- If people want that part of it removed, we can come back and remove that, but I will at least note that right now.

MR. SEBASTIAN: Thanks.

MR. HULL: Vincent.

MR. BONURA: I just wanted to add spawning on that closure, and then I was very adamant about having both sectors equal on the inches and length, depending on what we come up with. James texted me, and he's rebooting his computer, and it's down right now, but he wanted to add thirty-two inches on recreational and commercial.

MR. HULL: Okay. That's noted. Anything else, Vincent?

MR. BONURA: I think that's it for right now.

MR. HULL: Okay. Chris, you're up.

MR. MILITELLO: I just wanted to back up what Jack said, thirty-two inches, or I think it was the thirty-four inches, and then 1,200.

MR. HULL: Right on.

MR. MILITELLO: Thank you.

MR. HULL: Thank you. Harry.

MR. MORALES: I would say, as a group, we have -- The first line, more conservative approaches that benefits both sectors, I like what Bob is talking about, in terms of the science versus the

economics. Now, the science might say that you can catch two-times the amount of fish, but the economics tells us all that it's foolish, and, in this case, we need to pay attention to the economics of it, to ensure that we don't hurt that fishery.

With the one gentleman that talked about getting from \$1.50 to \$2.00 a pound for amberjack, well, if you double the supply, what are you going to do to that? Then, in the short term, it's going to drop like a rock, and now he's fighting a lower price and catching less fish, and it doesn't make sense to me. I agree with the thirty-four inches, and I also agree with the other gentleman that said that the council is never going to take you from thirty-six to thirty, and there's a political battle that has to be fought with Florida once you go off of the thirty-six, and you've got to get them to go along with it, and so, in my opinion, it wouldn't make sense, and I sure wouldn't agree with taking the recreational, especially here in South Carolina, from twenty-eight up to thirty or thirty two. For recreational, it doesn't make sense.

MR. HULL: Thank you. Andy Fish.

MR. FISH: I would be in favor of decreasing the commercial size limit only if the recreational comes up also, and I think that would put a lot more pressure on the school as a whole, and I think those fish are going to come from somewhere, and I think it has to be a compromise, if it happens at all.

MR. HULL: I think, Mike, what he said was maybe a compromise on coming down on the commercial to some level, but, at the same time, you would have to bring the recreational up, and I think that's what he was saying there, a compromise on both.

MR. FISH: Yes, and I don't think you can just take more fish out of the school, because you're catching smaller fish, and you're pushing inshore more, because the smaller fish are closer, and I think it's to save more fish, and so, yes, meet in the middle somewhere and both be the same.

MR. HULL: Okay, and to have the same, which we have up there, too. Right on. Thank you. I don't see any more -- Well, here comes Vincent. Come on, Vincent.

MR. BONURA: I was just going to agree with Andy Fish there, and that was all.

MR. HULL: Okay. Thanks. Then I don't see James' hand, and I know he's had internet -- Are you there, James? I knew you had it up earlier.

MR. BONURA: His computer is down right now.

MR. HULL: Okay. Well, he can type in to you, or to me, and he can message us, or I guess he did you already. Okay. Mike, is that kind of what you were looking for from us?

DR. SCHMIDTKE: Yes, I think so. I think just the one thing to note, and this may be the thing to take a vote on, because I think other things are presented more as options for consideration, and the council will go through the process, and they will have to choose among those options anyway, even if they're not a single recommendation from the AP, but one thing to note is the thought of a spawning closure for both sectors, a complete closure for both sectors, in April, and that was one of the ideas that was pointed out as not unanimous and doesn't really have a lot of different options

to consider there, and so, if we could get a gauge on whether the entire group wants to include that or not, and then I think that we would, after that, be able to say this is the list of recommendations for greater amberjack from the AP.

MR. HULL: Okay, and so I believe that was Vincent that initially made that, and so I don't know -- Vincent, do you want to -- If you want to push this forward, we need a little more agreement. Do you want to make a -- Well, there's Myra. Go ahead.

MS. BROUWER: Thank you, Jimmy. The advisory panel can always just tell the council that they want them to reconsider the commercial closure for amberjack, and that alone, I think, implies that there will be analysis put together for them to consider whether it's something that they want to go forward with or not, and it would come, of course, back around to you guys, and so I think we've heard that there is some support for that, and not, and that's where those kinds of things would come out in the subsequent analysis, and so just I don't want you guys to get too wrapped up. That's it. Thanks.

MR. HULL: Okay. Do we need to take a vote on that, Mike?

DR. SCHMIDTKE: I guess we don't need to take a -- Given what Myra just said, we don't need to take a vote, if that's kind of a general recommendation that the AP would have, is that the council reconsider and just take another look at that, to see do they want to consider any other type of closure along with that commercial one that's in place.

MR. HULL: I think even leaving the "not unanimous" there is probably good, and, of course, we know that the entire -- This is going along with the motion, and there was some opposition to that, too. Okay. Vincent, go ahead.

MR. BONURA: The whole thing I've got there is the commercial is allowed to keep a fish, or two, in April, but we can't put it on the market there, which I don't quite get that one. If we're allowed to keep it, why can't we put it on the market?

MR. HULL: Okay. We added that language there, Vincent. I mean, from my perspective, the reason that that's in place is, as I said earlier, a lot of times, on commercial trips in April, you're not targeting -- You're vermilion fishing, and you catch a few jacks, and, rather than discard them to the sharks, we have some retention limit, to kind of reduce dead discards and waste the resource, and we're not targeting jacks, but we interact with some, and so you can have it for personal use. I thought that's what the reasoning was behind it, but I could be wrong, but I'm sure we'll get an explanation down the road.

MR. BONURA: There's one more thing we could add, if you would like, Jimmy, and how about a hundred-pound bycatch allowance in April?

MR. HULL: Well, that's another way to look at it. Rather than per person, you go by poundage. As I say, this will come up, and we're notifying the council of all of our concerns here, and this discussion has just started, and so you'll have plenty of opportunity to make further recommendations and massage this thing out the way it's going to end up. I think, for time's sake, I think we have wrung this thing out, as much as we can, and we need to probably -- Unless there



is some other really pressing idea or issue here, I think we need to move on, if everybody is cool with that. Back to you, Mike.

DR. SCHMIDTKE: Okay. Jimmy, just making sure, before we move, this list, this is the recommendations, and you're fine with this format, this being presented to the council in this way?

MR. HULL: Well, I think so. We have the motion approved as-is, and then we make the following recommendations to the council: to make a more conservative approach that benefits both sectors; consider decreasing commercial size limit to thirty-four, thirty-two, or thirty inches; consider equal commercial and recreational size limit of twenty-eight inches, thirty inches, thirty-two inches, and so making them equal, both sectors; consider increasing the commercial Season 2 trip limit to 1,200 pounds; reconsider the April closure of amberjack and consider including recreational and allowing sale of commercially-landed fish or a full closure. Let me read that one again. Reconsider the April closure of amberjack. Consider including -- Okay. Consider economic implications of large changes in ACL. All right. I like it. Is everybody good with it? If you're not, say so now. I don't see any hands, Mike.

DR. SCHMIDTKE: All right. Then I'll move just to this last action of the amendment, and this should be a relatively quick topic. We have, in place through the Comprehensive ACL Amendment, recreational annual catch targets for the Snapper Grouper Fishery Management Plan. These catch targets are levels that are set below the ACL that are used to account for uncertainty in recreational catch estimates.

For the Snapper Grouper FMP, they are not codified, and they are not used for management purposes. One place where you can see that like they get incorporated into management is for something like in the Mackerel Cobia FMP, but, for the Snapper Grouper FMP, they're not used, and so kind of the thought was to potentially remove these catch targets, so that we don't have to continually update them every time we update the ACL.

Alternative 1 would keep the catch targets in place, and we would continue to update them every time we update the ACL, and Alternative 2 would remove the catch targets, and so, if the AP has any comments regarding one alternative or another, then you can let us know.

MR. HULL: Okay, and so does everybody understand Action 3 and the removal of the recreational annual catch targets? This has everything to do with recreational, and apparently it's something that they haven't been using, and this is their accountability measure to make sure that that sector of the fishery doesn't go over.

DR. SCHMIDTKE: Jimmy, it's not used in the accountability measures. It could be, and it's something that could be used as part of accountability measures, and is applied there for some other fisheries, but, for snapper grouper, for this, it's not used for any accountability measure, nor used for setting any limits.

MR. HULL: Okay, and so, I mean, rather than get into the weeds on it, that would just raise questions for me of what are the accountability measures used for the recreational sector, but we don't have to get into that here. AP, let's hear from somebody. What do you want to do here? Recreational guys and commercial guys, any comments here, or any questions? Do we want to make a recommendation, or do you just want to move away from it? Jack, go ahead.

MR. COX: Jimmy, we've heard that the recreational sector doesn't like in-season closures that the commercial sector has to abide by. With that said, and what we're looking at here, I would really like to -- You just asked a very good point of what are the accountability measures, and so it's kind of hard to comment on this if we don't know what the rest of them are, and I would like to hear just a brief summary, and I don't think it would take but just a second, if we could get that from either Mike or Myra.

DR. SCHMIDTKE: Generally, the accountability measures only -- It varies by species, but kind of one of the more general ones that is in place is that, if they -- If landings go over the ACL, and the stock is overfished, in an overfished status, then you would take one more year, to see if it's a continuing trend, and, if it's a continuing trend that it goes over the ACL in multiple years, then there would be some form of payback introduced, but that's only if the stock is overfished, but the recreational annual catch target doesn't affect that. The annual catch target is for, the intents and purposes of the management plan, just a calculated number that doesn't get used in management, and so this is more of a -- This really is more of procedural thing. Do we need to keep on adding an extra action in our amendments for a number that is not being used in the management?

MR. HULL: Does that do it for you, Jack?

MR. COX: Kind of. It's pretty vague. I mean, you know my frustrations on how accountable we are, but Myra has got something to say, and I would love to hear what she's got.

MR. HULL: Myra.

MS. BROUWER: Thank you. I just wanted to remind you that the council wants to look at recreational accountability measures overall, and there is an amendment that's been sort of put on hold, pending discussions of this private recreational workgroup that we talked about yesterday, and the council is not looking at changing accountability measures for amberjack in this amendment, and, as Mike pointed out, the annual catch targets, which is what we're talking about here, are not tied to accountability measures.

The current ones are an in-season closure for both sectors, when the ACL is met or projected to be met, and then there's that payback that comes into play, as Mike said, only when the species is overfished and the total ACL is met, but the council is not looking to change those at this point, and so I just wanted to make that clear. Thank you.

MR. HULL: Thank you, Myra. Guys, basically, they're not using this, and they're probably going to get rid of it, and they have other ideas that we'll have to learn about what they're doing. As she said, they're working on it. Is there something that we want to see? Myra, are you back?

MS. BROUWER: I'm here.

MR. HULL: Okay. Well, I just saw your name came up again. Robert Lorenz.

MR. LORENZ: I thought that, originally, when we were talking about the accountability measures, that these would come in almost as a yellow light before you go to the red light and then

strong accountability measures and paybacks, but, if they're not being used -- You know, I'm all for as much simplicity as we can have, and so, based on that basis, I would favor Alternative 2.

MR. MORALES: If you make that a motion, I'll second it.

MR. LORENZ: **I would like to recommend that Alternative 2 be implemented by the council, removing the recreational annual catch targets.**

MR. HULL: Who was that that wants to second it?

MR. MORALES: That was me, Harry.

MR. HULL: Okay, Harry. I will read it. It's been seconded. We'll make sure it's right, and then we'll have a discussion. **The motion reads: Recommend the council select Alternative 2 as preferred, which removes the recreational ACTs.** It's been seconded. Is there some discussion on this, before we take a vote on it? **I don't see any hands, and so let's raise hands if you are opposed to the motion. I don't see any hands, Mike, and so it looks like the motion passes.**

DR. SCHMIDTKE: All right. Jimmy, that's all we had for Amendment 49.

MR. HULL: That's good. Let's see the timeframe we're at. We're at 11:38. We're getting really close to lunchtime, and the next item is going to be yellowtail. Do you want to try to just get through some easy stuff on yellowtail, before we take a twelve o'clock break, or break early and come back early? What do you want to do, Mike?

DR. SCHMIDTKE: Myra, I know we had talked about potentially doing the discussion document first. Would we want to do the fishery overview, to I guess introduce it, and then come back with the discussion document after lunch?

MS. BROUWER: Yes, and the discussion document is not going to take only twenty minutes, and we had wanted to maybe put that in front of the AP before we get into the fishery overview, but we can flip it back, if you all would like. It's up to you, Jimmy, but I'll just have to check with Chip and see if he's ready to do the fishery overview.

MR. HULL: If you're going to leave it up to Jimmy, then Jimmy says let's break for lunch and come back fifteen minutes -- In the timeframe, come back fifteen minutes earlier, or something like that, and so that's what I would want to do, and so I will leave that now back to you, Mike.

DR. SCHMIDTKE: Okay. Let's do that then. How about we can break for lunch now, and plan on coming back at 12:40, and we'll start up a little bit earlier in the afternoon.

MR. HULL: Sounds good to me. Okay, everybody. You hear that? Have a good lunch, and be back at 12:40 to get into the yellowtail snapper discussion. Thank you. 12:40.

(Whereupon, a recess was taken.)

MR. HULL: I would say let's get going, if you're ready, sir.

DR. SCHMIDTKE: Yes, I think we're ready.

MR. HULL: Okay. Good deal.

MS. BROUWER: Welcome back from lunch, everybody. I hope everybody got to stretch their legs a little bit over lunch, and so here we go with yellowtail snapper. As Mike mentioned yesterday, the council directed us to begin work on an amendment to adjust catch levels of yellowtail and make any other changes that are needed, and so we're just getting started.

First, a little bit of background, and I'm not going to get too much into the weeds here. The council took action to increase catch levels for yellowtail back in 2013, and the fishing year, remember, was changed in 2016, and so there's been a little bit of changes in the management of this fishery over the last ten years or so.

Yellowtail are assessed as a single stock that spans both the South Atlantic and the Gulf Council jurisdictions, and so SEDAR 64 was completed in 2019, and that was with data through 2017. The stock assessment indicated that the stock is not overfished, and it is not undergoing overfishing.

Because it's a single stock that spans the two councils' jurisdictions, both Scientific and Statistical Committees from the South Atlantic and the Gulf had to get together to make the acceptable biological catch recommendation for the stocks, and so they did that in October of last year, and the council received that recommendation at their December 2020 meeting. The SSCs actually initially met back in July, and there were some issues, and they couldn't quite agree on fishing level recommendation at that time, and so then they met again in October. Where we are now is both councils have now initiated development of amendments to their respective FMPs to adjust those catch levels for this species and, like I said, consider any other changes to management, as needed.

What I will do here is I just wanted to go over what the council considered in Snapper Grouper Amendment 44, and this was back in 2017, and the council worked on that amendment for some time, and it got as far as the public hearing stage, and so I'm going to go through the actions that were considered at that time, and the purpose of that is just to -- Well, it's to remind everybody of the things that the council was thinking about back then, to elicit input from you guys on whether some of these things should continue to be considered, or maybe just take them off the table, and that sort of thing.

The amendment was paused, mainly because the stock assessment was underway, and we got comment from the AP, at that time, and from the public, that they would prefer that the council not take any action on yellowtail until the assessment was completed and also after the MRIP estimates were revised, based on the new methodology, as we've been talking about, the Fishing Effort Survey.

Now I will go over the document, and, I said, this is the list of actions that were considered. At the time, the council wanted to modify, potentially, the jurisdictional allocation of the ABC, and so, right now, the ABC is split 75 percent to the South Atlantic and 25 percent to the Gulf, and that allocation was arrived at by using half of the average landings from 1993 through 2008 and the other half of the average landings from 2006 through 2008.

At the time, the council was thinking that maybe we should consider removing the jurisdictional allocation, and so there would just be one single stock that both councils would kind of manage jointly, perhaps modify it using different years of landings, and they had some alternatives looking at that. They also considered specifying a single ACL, and so, if the stock was managed jointly by both councils, then you would have to have a single annual catch limit for both. Right now, of course, as you know, those are separate, and, back then, they were considering perhaps looking at a total ACL using a chunk from the South Atlantic and a chunk from the Gulf and various different configurations.

They also talked about adaptive management of the ACL and revise, or establish, sector allocations, and so, currently, for the South Atlantic, the commercial sector is allocated 52.56 percent of the total ACL. And the rec sector is allocated 47.44 percent. Those allocations were calculated using, as you see on your screen, the average landings from 1986 through 2008 and average landings from 2006 through 2008, and this is a formula that is probably familiar to many of you, is how the council has apportioned between the sectors for several of their managed species. On the Gulf side, there are no sector allocations, currently, for yellowtail snapper.

Here is where they considered several things, like removing the sector allocations for the South Atlantic, modifying them based on different years of landings, and they also talked about potentially setting a portion of the ACL aside as a common pool allocation, and so sort of -- If one sector went over their ACL, they could sort of borrow and tap into this reserve allocation.

They also talked about conditional transfers of a certain portion of the ACL from the sector that was not meeting theirs to the sector -- Well, from the sector that wasn't landing their ACL and transfer a portion of it to the sector that needed it, and maybe base that on different thresholds, and they had a series of minimum landings thresholds that they considered for such a scenario.

They also talked about moving -- Revising the accountability measures, and, right now, they're specified separately, of course, for the South Atlantic and the Gulf, and the South Atlantic has separate AMs for the commercial and the recreational sector. Here, they considered removing in-season closures until the ACLs were met, and so they also considered different post-season AMs, maybe reducing the length of the season the year after overage, and also looking at paybacks or implementation of trip limits that would get triggered when overages needed to be corrected, maybe bag limit reductions to correct for overages, and they also had alternatives that looked at accountability measures that would be applicable if there was this common pool kind of thing.

They also considered trip limits for yellowtail snapper. Right now, we don't have any trip limits in the South Atlantic or the Gulf, and so they looked at trip limits during the spawning months, and they looked at them from May 15 through July 31, and they had options for trip limits once a percentage of the commercial ACL was met and also trip limit options for multiday trips for yellowtail snapper.

All of this was, as I said, analyzed partly, until the amendment was ready for public hearings, and so we took this out for public hearings in the winter of 2018, and we held several listening stations at multiple locations in Florida, and we had 250 people, more or less, attend, and approximately 120 people giving us comments, and so we got a lot of information on this amendment back then, and so what you see on your screen is just a list, a summary, a very concise summary, of everything people had to say, and so I'll just go over that, quickly.

There was a lot of concern over combining the ABCs for the South Atlantic and the Gulf, because people thought that was going to set a precedent. If it was done for yellowtail, maybe the councils were going to want to do it for other species, and there was strong opposition to transferring this allocation between the sectors. People didn't think that was the best approach, and, if it was considered, it did say that it should be a temporary thing, and so leaning more towards that common pool allocation that would come into play under certain circumstances.

There was, of course, concern over the variability of recreational landings estimates, and they talked about when dolphin were not available. When the dolphin season was slow, it could lead to increases in the yellowtail snapper landings for the recreational sector. There were several comments considering trip limits during the spawning season, and a lot of them having to do with changes to the minimum size limit for this species. Right now, I believe it's twelve inches, and so they had suggested going up, and maybe consider fourteen to sixteen inches total length.

Again, talk about reducing harvest during the spawning season, and also trip limit step-downs were brought in as a consideration, and, as I already mentioned, just basically saying, hey, let's just wait until the next stock assessment is completed, and then look at what needs to be done for this fishery, and there was also some comments talking about how the recent change, at that time, to the fishing year, beginning in August, was actually working pretty well for the fishery.

We went through the process, and then, in March, the South Atlantic Council decided to pause work on this amendment, pending the assessment that was just completed and those adjustments to the recreational estimates, and then came Regulatory Amendment 32, and this was in response to the commercial sector bumping really close to their ACL and the potential to have that fishery closed in-season, and so there were a couple of in-season closures, on June 3 in 2017 and on June 5 in 2018, and the recreational sector was not getting anywhere close to meeting their ACL, and so that's what prompted this amendment being developed.

The council was considering several options, and there was just this one action in it, and they considered in-season closures happening only after the total ACL was met or a portion of the total ACL was met, and then the commercial sector wouldn't close until that happened, and so we brought this to the Snapper Grouper AP, in the fall of that year, and these are the comments that the AP had for the council, and so, again, reiterating that the August to July fishing year was working well for the commercial sector, and you guys talked about the price of yellowtail typically diminishing in the summer months, when a closure would occur, and so it wasn't really that impactful, if it were to happen, as opposed to other times of the year.

The AP stated their preference to wait until after the stock assessment was done, and they supported taking no action to allow changes in management to take hold and see how that played out and for the fishery to adjust. At the time, recall there was some concern about the destabilization, because of the hurricanes in 2017, but the consensus was that people had adjusted and that everything was stabilizing.

One thing that was brought up was this intentional discarding of small yellowtail in the summer months, and some folks suggested that an in-season closure during that time could actually be beneficial and reduce that practice, and so that's one thing that we're wanting to get a little bit

more information from you guys this go-round, to see if that's still a concern and if that's still something that's going on.

Then, in December, the council said, never mind, and let's just pause, or not even pause, but I think they just said let's not submit this to NMFS, and work on that amendment just stopped, and so here's where we are. These are the current regulations right now, and you see what the total ACL is, about three million pounds, and that's split 52 percent to the commercial and 47 percent to the recreational, and you can see what those ACLs are on your screen.

This is a summary of the AMs, and it's basically an in-season closure for both sectors if the ACL is met and then this payback and reduction of the recreational season if the ACL is exceeded like two years in a row, but, again, this is tied to the species being overfished, and so that's not the case with yellowtail, and so that post-season AM doesn't kick in.

The fishing year is August through July, with a minimum size for both sectors of twelve inches, and the bag limit for the recreational sector is ten per person per day within the snapper aggregate, and so this little table shows you the recommended catch levels for the South Atlantic and Gulf combined. These are numbers in millions of pounds, starting with 2021, and you notice here, again, how the numbers go down, right, and so the ABCs decrease over time, and that's because there is kind of like a surplus of biomass, and so, as the fishery progresses, you are fishing down towards that maximum sustainable yield level that is sort of a long-term equilibrium level, and so that's why those numbers go down over the years.

Here are the next steps to get us started in our discussion, and I will go over these, but, also, Chip Collier is going to give you an overview of the fishery, like he did yesterday for snowy and like Mike Schmidtke did this morning for amberjack, to give you guys a little bit more information, so that you can visualize where things are in the fishery and perhaps get you thinking more about things the council might want to consider for these species.

First, what needs to happen? Step Number 1 actually has happened, partially, and we do have the time series of landings that include the new recreational estimates, and so we just finished getting all of that information put together and back to 1993, and so now the South Atlantic and the Gulf Councils have to agree on how they want to split that ABC. Do they want to keep the same formula that they've been using, or do they want to try a different one?

Once that ABC gets split up, then the council has to select the total ACL, and then they have to figure out do they want to change sector allocations. Again, we have the formula that we've been using, and maybe they want to use a different approach or use that same formula with the new landings, and who knows. Then, as I said, consider whatever other changes need to possibly be considered for this fishery at this time, and so I will pause here for any questions, and then we'll go on to the overview with Chip.

MR. HULL: James Paskiewicz.

MR. PASKIEWICZ: It looks like, with this, it's not quite as aggressive of an increase, as far as the total ABC for this species, and, from my basic calculations, under the current split between the South Atlantic and Gulf, it was to stay at 75/25, in the year 2023, the South Atlantic would already fall under its allocation for its ACL, and so it would be basically 2.99 million pounds, as opposed

to 3.03 million pounds, if that total ABC was -- If the South Atlantic represented 75 percent of that number, and then, moving forward, in 2024 and 2025, it would be falling under that in those years as well. With the species being deemed not undergoing overfishing and not being overfished, why only in two years' time are we going to see the dip in our ACL?

MS. BROUWER: The 75/25 percent split was based on applying the formula that I showed, and I can go back to it, to the landings.

MR. PASKIEWICZ: I am just saying, assuming that we decide to stay with the 75/25, and I think we should at this point, but, when you take 3.99 million, and you figure out what 75 percent of that is, we're starting to fall to a level that is lower than what we already currently have.

MS. BROUWER: That is a consideration. We have not done that calculation, because it has to be done -- If you apply this formula to the revised landings, the split may end not being 75/25, and that 75/25 percent split was based on pre-FES landings. Now that the landings have been revised, if you apply this same formula that's right here on your screen, the split may end up being different, and we don't know what that's going to look like just yet. Does that make sense?

MR. PASKIEWICZ: Okay. Yes, absolutely it does, and how are we supposed to make an informed recommendation, if we don't know what that's going to look like?

MS. BROUWER: Well, at this point, the council is not specifically looking for a recommendation on that. I am just sort of reminding you guys of what has happened with the management for this species, and I think what the council would like to hear from you is how has the fishery changed since they were looking at all these different measures, and are there things that you all can recommend that they pay more close attention to, or, basically, a more general overview of the fishery, because we're so early in the process, and we haven't even yet had the time to plug in the revised landings into this formula, to see what that would look like, and so don't feel like you have to comment specifically on these various things.

MR. PASKIEWICZ: Okay. Thank you.

MR. HULL: Chip.

DR. COLLIER: Thank you. Just to build on what Myra has already said, but focusing more on the stock assessment side of things, this was brought up, that a potential change in the landings and a change in the ACL that would likely be coming out of the most recent stock assessment -- The SSCs from both the Gulf and South Atlantic got together and reviewed this assessment, and there was a lot of consideration of those potential ACL closures that would be occurring, and so the analysts from FWC did a tremendous job of kind of looking into that issue, and the previous stock assessment really seemed to mis-specify the amount of landings that was sustainable, and so they used an improved stock assessment model.

What came out of that was, yes, the stock is healthy right now, but, even with the increase from the FES numbers, it is going to be -- I guess, if you think of the currency side of things, the value, or the amount that can be harvested, is going to be going down somewhat, even though the recreational catch is going up. It's a little bit confusing, but, basically, the fishery is scaled based on the amount of landings, and so it was originally closer to that ACL previously than was



originally thought, and so this new model is indicating that, and so, therefore, there is some concern that the ACLs will be met, and the SSC definitely discussed this quite a bit.

MR. HULL: Is that all, Chip?

DR. COLLIER: Yes, that's it.

MR. HULL: Thank you.

MS. BROUWER: If I may, Jimmy, I just scrolled down to the very bottom of my little document here, and I do have some questions for the AP, and, again, don't feel like you have to answer these just yet, and perhaps we let Chip give us the overview of the fishery and then we come back to these, but let's just go over them, so you can be thinking about them.

Basically, what the council would like to know is, is the fishery being managed properly in federal waters, in your opinion, at this time? Do you have any concerns regarding the fishery? Are there issues regarding permits, for example with the dual-permitted vessels in the Keys, and are there any problems with that? This was something that was brought to FWC personnel at some point, and so Jessica mentioned wanting some discussion about that particular thing, and, also, this practice of discarding small fish during the summer months. Jessica, again, said let's get the AP to tell us a little bit more about that.

MR. HULL: So it will be Chip next.

DR. COLLIER: Yes. This is set up in a very similar way to the snowy grouper fishery description. I will point out that, these tabs up top, we have an additional tab in this one, and it does include your fishery performance report that you did in 2018, and so, if you have a question about what was being described by the Snapper Grouper Advisory Panel, that is available, and then, really digging into the details of this one, it is a much more positive assessment than what -- As Myra had described it.

If you look at the fishing mortality rates over time, you can see that they were pretty high in the beginning, but they have remained well below the fishing mortality at maximum sustainable yield since 2000, or since the 1990s, and you can see how the population has really increased, and this is that surplus that Myra is talking about here, and so, in the beginning, you get to fish at a higher rate as you're beginning to push the population back down to the spawning biomass at maximum sustainable yield.

Unlike snowy grouper, there is very few points that are in this pinkish color, and so indicating that the population is over here in green, which is that sustainable level, and so things are going well for yellowtail snapper, and then, going down to one of the last plots, if you look at the information that's likely driving a lot of this, looking at the indices of abundance, you can see, back in the early 1990s to the late 1990s, you can see a decline in some of the indices, and then, over time, you're seeing this really good increase in a variety of indices.

These points on here are from the RVC, which is the visual census survey, the diving survey, and you can see both of them are going up from low points in the late 1990s to the more recent time period, where they seem to be much higher. All of that is indicating that the stock is doing well,

and then we have the data that is being used. Myra had talked about the allocation in the South Atlantic, and that is provided here, and you can see that the commercial sector is either getting close to or exceeding their ACL in the most recent time periods, whereas the recreational sector tends to be below their ACL.

Looking at the distribution of landings and who is catching what, you can see the landings from 2000 on up to 1999, and I will point out that these are fishing year landings, and so, if you look from January to December, you're going to get very different landings than what I had presented here.

The seasonality, you can see the yellowtail snapper tends to be towards the middle of the time series, and so in the -- Generally, March through September is when increased landings tend to occur, and you can also see this general trend of landings increasing through time, and so some of the highest months were 400,000 pounds in 2000, but, if you begin looking at 2013 and on, you're seeing some 600,000-pound months. I am going to skip over the state landings. As you guys know, this is mainly a Florida fishery, and so I don't need to harp on that to you too much.

We do have some information on commercial releases for this fishery, and you can see, as the fishery has progressed through time, there's been an increase in landings, up until about 2018, 2017 or 2018, and then there was a dip in the landings. Over that same time period, you're seeing a decrease in the overall number of discards, and I do want to point out the relative scale between these, the differences in it. All of these are pounds of fish, and it's a million pounds of fish, up to two million pounds of fish, and the scale on the number of discards is only 2,500 fish up to 12,500 fish, and so it is a much lower proportion of released fish.

Here is the month of landings for the commercial fishery. Once again, it's showing most of the -- It tends to occur during March through August, and that tends to be some of the peak months for some of the harvest, and the states generally -- The harvest is generally occurring in Florida, and I do want to provide you some of the information on the length distribution, and so this is from commercial vessels. I do want to point out that this is in fork length, and you're seeing a lot of the fish right here at this ten-inch size limit, or ten-inch size, and, if you convert from a fork length to a total length, and the regulations are in total length for this species, a ten-inch fish is about a twelve-inch fish, which that is the regulation size.

Then, looking at the pounds caught by different trip sizes -- Once again, this is very similar to snowy grouper, except it goes up to a thousand pounds. Starting off here, in that first block, that's less than fifty pounds being brought in on a trip, and then, looking at the next block, that is fifty to 150 pounds, and so on up.

You can see there is a peak, with a lot of pounds that are being caught on trips that have low landings, and then you get this spike, down here at the end, where trips over a thousand pounds are catching a substantial portion of the catch for the year, and then, if you convert that over and look at the number of trips that are doing it, you can see the vast majority of the trips, and this is typical in most fisheries, the vast majority of trips are catching very few pounds, and then you're seeing a few of the trips catching a lot of the pounds.

Switching over to the recreational data, this is showing a slightly different picture than what we were seeing in the commercial data, where the recreational landings, which is in numbers of fish,

is pretty close to the number of fish being released. It's a little bit more spread out, as far as when the fishery is occurring for the recreational fishery, and so I will let you guys interpret that, but, once again, you're seeing this increase in landings, basically from 2013 on, where you're seeing some of these higher peaks in that time series.

All the landings were coming from Florida, and then I have this color-coded based on where the landings were reported. I only have this for data that's reported through MRIP right now, and I do have data provided to me for the headboat fishery, and I just have not had time to put these into the plots yet, but you can see that most of the length data is coming from the private recreational fishery, and they tend to be right around that size limit that I was talking about, if you convert from a fork length of ten inches to a total length of twelve inches. As you get larger, the fork in the tail gets slightly larger, and so, if you're looking at twelve-and-a-half to thirteen-inch fish, that's going to be -- With a fork length, that's going to be a total length of a fifteen to sixteen-inch fish.

Then I still need to work on this code right here, where we're looking at some trips catching up to twenty yellowtail snapper per trip, and I believe that's incorrect, or it could be the charter boat captains are being counted in some of these trips, but take this with a grain of salt right now, and I really need to check on these data, to make sure this is coming out properly.

Then the growth of this fish, and you can see that they grow a little bit faster than what snowy grouper were indicating, and they grow from about seven inches, here, up to fifteen inches in five years, and so it's not rapid, but it is still pretty quick. This is the length-weight relationship, and, once again, if you look at these dots, that indicates age-one, age-two, age-three, and so you can see the general size and weight of a fish, depending on age.

Similar to snowy grouper, we have a proportion mature, and you can see a lot of these fish -- Almost 100 percent are mature at age-ten, or at length-ten, and that's in fork length. In this assessment, it assumed a constant proportion of females to males, regardless of size, and that is all the information that I had for you, and, once again, this is meant to be a quick look at some of the data that's available for yellowtail snapper that might be useful as you guys are providing recommendations to the council.

The information is likely to change, especially some of the detailed information on size distribution and number of fish caught per trip, but this is just a quick overview, and some of it might be outdated, but it's just to really provide some background data as discussions get started for an amendment to the fishery management plan. With that, Jimmy, I will pause and take any questions that people might have.

MR. HULL: Yes, sir. Raise your hand if you have some questions for Chip. I know that, looking at the document, the questions for the AP, there was some questions that they were suggesting that we try to answer. James, go ahead.

MR. PASKIEWICZ: I just wanted to thank Chip for that presentation, and I think that there is a really good grouping of information there on this particular species, and I think that a lot of it is spot-on. Moving into the questions that we need to answer, we have to discuss, I think, a little bit of an anomaly that's going on in this fishery right now, where we're not exactly replicating what has happened in the past with this fishery, and we need to talk about that.

MR. HULL: Okay. That's good, and that's kind of -- Any more questions for Chip? I don't see any more hands, Chip.

DR. COLLIER: Okay. If Mike or Myra want to take the screen back over, they can display those questions again.

MS. BROUWER: I will do that right now. Are you all seeing the questions now?

MR. HULL: Yes.

MS. BROUWER: Okay, and so, Jimmy, I'm ready to capture any recommendations or thoughts the AP may have, or answer any other questions.

MR. HULL: Right on. Okay. James, you're up.

MR. PASKIEWICZ: I want to highlight a few issues that I'm seeing on the water with the harvest of yellowtail snapper. The amount of recreational vessels on the water, we can all agree that that number is on the rise, exponentially, and a lot of you may know, or you may not know, that the commercial effort for yellowtail snapper has been mainly a top-water, feeding-frenzy situation, where these fish come to the back of the boat, because we're providing a food source, and we are able to catch those fish that have gotten comfortable behind the boat.

This opportunity for commercial fishermen is going away on a daily basis, because of way more vessels coming in close proximity to commercial fishermen while engaged in commercial fishing, and not that there are any enforcement violations going on, and it's just not very courteous to your fellow fishermen, but that activity drives the fish down to the lower levels of the water column, and so it's been much more difficult to catch these fish, from a commercial standpoint, and, because of that difficulty level, I believe we are seeing the commercial effort drop dramatically. A lot of fishermen are getting frustrated with going out there and not being able to produce, because things are different than the way they used to be.

Typically, during the month of April, coming into May, we would have already landed approximately 80 percent of our ACL, and, for this year, this fishing season, we are currently at about 40 percent. I know that these aren't the numbers that we're looking at, and this isn't what we're evaluating, but this cannot go unmentioned, and I just wanted to ask any of the other panel members that fish for yellowtail snapper if they are seeing anything similar to what we are seeing and discuss a little bit about that.

MR. HULL: Any hands? I don't see any hands raised for further discussion on that from the other AP members, James. Well, I do now. Richard Gomez, you're up. Richard, keep trying to unmute yourself, and chime in when you can. James, I think that you have -- There's a recommendation there that was typed in of the abundance of vessels interfering with commercial fishing operations, and it's much more difficult to catch fish commercially, possibly causing commercial effort to drop dramatically. I mean, I get it. I assume the rest of the panel gets it. Does anyone want to provide more comment on that? Raise your hand.

MR. GOMEZ: I see it in the Lower Keys, as far as the commercial fishermen, and definitely we're dealing with it, and not that I'm a commercial fisherman, but we're seeing yellowtail snapper being

targeted a whole lot more than usual, even in the charter industry in the Lower Keys, and the offshore fishing has been so dismal that, just to put a catch together, when we normally wouldn't be fishing for yellowtail snapper at this time of year, we are targeting them more and more, and so, James, we're seeing that interaction between the recreational and the commercial, and, you know, I don't really speak to enough commercial fishermen to know how they feel about it. We just see it happening. (Part of Mr. Gomez's comment is not audible on the recording.)

MR. HULL: Richard, we're losing you. You're in and out. We're losing you. Vincent.

MR. BONURA: I just wanted to add, on that last bullet point there, the discarding of fish during I guess June and July, if I remember correctly, I think that was when we had that closure, back a few years ago, and the mangrove spawn is in July, and so I think the discarding of the fish was because of the closure during the mangrove spawn.

MR. HULL: Okay, and so he's got that. Mike is putting this up, or Myra is, and discarding of fish during June and July was occurring because of the closure of yellowtail snapper during the mangrove spawning. Is that what you were saying, Vincent?

MR. BONURA: Yes, pretty much. They were catching the mangroves in June and July, and, when that closure happened, a good amount of yellowtail were being discarded, because you legally could not retain them.

MR. HULL: Right on. James.

MR. PASKIEWICZ: To speak to what Vincent is addressing, I did bring up a set of circumstances to the panel, I think, two or three meetings ago, about bad-apple practices, and I think that this is what the council was asking for, as far as this practice of discarding small fish, and, since I brought that up, with the practice of -- Some fishermen will be on a mass of fish that will be 50 percent under twelve inches and 50 percent over twelve inches, and they are catching them at a rate that's so quick that you cannot possibly go through them fast enough, if you're measuring them one-by-one. You can't catch enough of those fish, and so they catch them, and they go right to the deck with them, and some of those fish were sitting on the deck too long and did not have -- A lot of those fish were dying.

Since I brought that up, I've made it a point to get it out there, in my community, that the South Atlantic Council, and FWC, is going to be looking for this. They're going to -- They are going to want to see this practice and make an example out of somebody, and, over that timeframe that the word has been getting out, I believe that this practice has really, really diminished, and I can say that very proudly, and I'm really happy that that bad-apple mentality, and just going from catching the most fish possible to being a little bit more conscious about what it is that you're doing out there, and I think that's starting to spread, and I'm pretty pleased with that, and so that issue, I think, is taking care of itself.

More to what Richie was saying, with the for-hire sector having to target yellowtail snapper because other fisheries are not as viable, he's absolutely right, and, kind of to go alongside of that, I would like to make a recommendation that the yellowtail snapper recreational limit be dropped to five per person, and still as a part of the ten overall snapper aggregate, but, this way, you don't have six guys going on a charter boat and targeting yellowtail snapper and bringing sixty fish

home. I think it's a little bit much, when we're starting to talk about the accountability on the recreational side and all of the unknowns, and I think that this will help us stay ahead of that and really help us understand who is catching these fish.

MR. HULL: Okay. We've got that up there. Now, there may be some comment on these recommendations, and so you guys take time to read this and give comment, if you feel you need to, if you don't agree, or if you have something else. While you're thinking about it, I think, staff, I'll just go ahead and read them, so everybody can think about it. We do have a name coming up. Chris, you're up.

MR. MILITELLO: So we just heard the report that everything is fine, and the fishery is great, and now we want to make changes, and I don't understand that. If it's great, let's leave it alone.

MR. PASKIEWICZ: Chris, if I can address that, as a -- Most of my income is made yellowtail snapper fishing, and we would have landed 80 percent of our ACL, in years past, and we're at 40 percent, and the data that's being analyzed here are from years that we never saw an anomaly like this, and so, traditionally, I would agree with you, 100 percent, but there is new information here to be considered, and I am trying to stay ahead of it and really get it out there, so that it's made known that we are not seeing the abundance this year that we have in years past, and, in my entire career, I've never really seen a situation like this, and I'm trying to understand it and get the council to help me wrap my head around it.

MR. MILITELLO: You don't think you're going to meet your quota this year?

MR. PASKIEWICZ: We're not going to come close. We have three months, a little over three months, left in our fishing year, and we have caught 40 percent.

MR. MILITELLO: All right. Thanks for that info.

MR. HULL: Richard Gomez, you're up.

MR. GOMEZ: Let me just ask James this, because I missed a little bit of the beginning of this conversation. Are you saying you're not meeting the quota because recreational fishermen are getting in the way of you, or just because you're not seeing as many fish? Before you answer that, let me just add that, as far as the charter boat industry goes in the Lower Keys, I think it would be hard for us to just want to settle for five fish per person.

What might be more workable would be to leave the captain and the mate out of that ten-fish limit, and that may be a little more acceptable or something, if everybody felt that something needed to be done, because that would give us a few more fish, and some days that's all the eating fish they're going to get, besides if they can keep a grouper and things like that, but, anyway, tell me about that quota one more time, James. Why haven't you met it? Is it because of the recreational fishermen getting in the way?

MS. PASKIEWICZ: I am certainly not looking to place blame on anybody. I am just simply describing the factors that have made it more difficult for us to harvest the fish in the way that we've become accustomed to. To answer the question about seeing the fish, I have been in contact with a number of commercial divers that say that they're seeing plenty of yellowtail, maybe even

more than they had been seeing in the last two or three years, but I do know that, if we're not seeing them in the upper portion of the water column, because of boat activity, and not seeing them in the chum slick, that doesn't mean that they're not there.

I would really stay away from trying to point the finger as to who or why, but just identify that we're undergoing a shift from what it had been to what it is right now, and the biggest variable in the accountability of this particular species has been the recreational sector, and I wouldn't be asking for anything that's uncommon and already not been set as a precedent. The mangrove, or gray, snapper is already at five, and it's been at five for a good period of time, but we're not exactly talking about managing that species as much as we're talking about yellowtail. If the biggest unknown variable is the recreational sector, and there is already a precedent set with another species, or another snapper, then why don't we just eliminate that being a question-mark and put yellowtail at five?

MR. GOMEZ: Can I answer that?

MR. HULL: Of course. Go right ahead.

MR. GOMEZ: We're talking about the charter boat industry, and we're talking about -- Generally speaking, we're fishing the reef and beyond, and, generally speaking, we're only able to get those snapper when they start spawning on the reef, and so, when we're putting that bottom fishing catch together, much of the year, gray snapper isn't even a factor, and so we're able to live with the five gray per person, and, obviously, we would rather have ten, because I think that fishery is strong, but, you know, it doesn't -- We're not targeting the grays year-round in the charter boat industry, because we're not, generally speaking, going to find our five gray snapper somewhere inshore when we're already offshore.

MR. HULL: Okay.

MS. BROUWER: Richie, I just wanted to make sure that I captured your suggestion, that bottom bullet, if you wouldn't mind making sure that I have written what you intended.

MR. GOMEZ: Okay. I can't read it right now, because I'm driving, and so if you could read it to me.

MS. BROUWER: I'm so sorry. Yes. My understanding is you said that the charter industry in the Lower Keys would not likely support a reduction to five per person, and then you said maybe a reduction for the captain and crew, and I wasn't sure about that part.

MR. GOMEZ: So put a big maybe on that, because we haven't discussed it in-depth, and this is something that's just coming up right this minute, and so what I'm saying is we would rather see nothing happen with the yellowtail snapper in the Lower Keys, and that I know for a fact, but, if we were forced to live with something, I would think that we would be able to wrap our hands better around leaving the captain and mate out of that limit, rather than going to five per person, but, again, I am speaking as myself, as that charter boat fisherman, and I'm not speaking for the industry right now.

MR. HULL: We have now adjusted that, Richie, to say “if necessary”, which kind of captures what you’re saying, and you really prefer no action on that, on it, but, if necessary, you would -- Possibly the industry would agree to some compromise like that, and then she said, but, prefer no action, and I think that probably more reflects what you said there. Myra.

MS. BROUWER: Thank you, Jimmy. I have a question that I would like to read, if it’s okay with you, from one of the folks listening on the webinar.

MR. HULL: Of course.

MS. BROUWER: To what extent does COVID and its effect on markets explain the decrease in utilization of the quota this year?

MS. PASKIEWICZ: I can answer that.

MR. HULL: Go ahead, James.

MR. PASKIEWICZ: As a wholesale dealer for yellowtail snapper, it took us about five weeks to really regulate -- To really find a way to be able to move our fish in a different way than we had been normally. Once retail outlets were deemed necessary for food service distribution, a lot of our fish that would normally have been consumed in restaurants went directly to the general public and got through retail locations, and it did not take us a long to stabilize that way.

As far as effort is concerned, I would say that there’s probably a fair amount of roadblocks that commercial fishermen may have faced, as far as what they’re willing to do, getting out on the water. I mean, I know that, harvesting, you don’t have to really worry about wearing masks or anything like that, and you just have to be comfortable who you’re fishing next to, but I wouldn’t be able to say that it wouldn’t make it harder to do all the other things, like getting chum and ice, depending on your different situation. Not everybody has their own fish house, and so I would imagine that it was harder for commercial guys to make trips, generally speaking, but, as far as the sale of the product, it’s been pretty much a slam-dunk since about five weeks into the pandemic.

MR. HULL: So, James, do you think that that may also -- Other than what you’re seeing on the water, and you’re not seeing the fish in the upper water column, maybe that had something to do, in addition to the lower harvest on the commercial side?

MR. PASKIEWICZ: What specifically, Jimmy?

MR. HULL: In the amount of harvest, the percent, where we’re at on the ACL. Is that a limiting factor, the COVID-related problems, for people to get out and harvest the yellowtail, and could that perhaps have added to that?

MR. PASKIEWICZ: I mean, I certainly wouldn’t rule it out, but, to be 50 percent less than where we would normally be, and having a price point that is very strong, with plenty of incentive for commercial fishermen to be on the water to catch these fish, if they’re easy to sell, and the price is high, and the reason that we’re not getting the effort is because the fish aren’t easy to catch, I don’t think it’s a main contributing factor, in my opinion.



MR. HULL: Okay. Thank you. I can say, in my region, northeast Florida, and not particularly pertaining to yellowtail, but to fishing in general during the pandemic, you have never seen so many boats on the water, because, as people couldn't go to work and things were shut down and they were scared, that's where they went, and, I mean, the waterways and the ocean were packed. Okay. Mike or Myra. James, you're back. Come on.

MR. PASKIEWICZ: I 100 percent agree with you that, during the pandemic, there have been so many more people on the water, just because it's a socially-distanced activity. I mean, you take two or three people, your close ones and your family, and you go out on the boat, and you're automatically socially distanced from everybody else, and it's a beautiful thing. Again, I really don't want to point the finger, and I really feel like I'm not, but we have seen more and more activity on the water, and I think that that's a main disruption for this fishery, is that the fish cannot get comfortable.

MR. HULL: Right on. Well, I think we've covered a lot of this, and we should probably go back to staff, and there is another bullet point or two there that somebody may want to comment on, in addition to this, and then I would like to read it over and make sure that the entire AP is good with it, before we do get finished with this. Back to you, when you're ready, Myra.

MS. BROUWER: Whatever you would like, Jimmy, and, yes, I'm putting these notes up, so everybody can see what I'm capturing, and not necessarily for you all to vote on them, but absolutely, if I've not captured something, or if I need to reword something, please let me know.

MR. HULL: Okay. The other bullet point I see as questions for the AP is concerns regarding the fishery, and we're covering that now, and then properly managed, and we're covering that now. Issues regarding permits, dual-permitted vessels in the Keys, and I don't know that we touched on anything there, and maybe there is no issues, and we talked about the practice -- As James said, he's right in the heart of fishery, a high-liner in the fishery, and he doesn't see as much -- It's not as prevalent as it was when we brought that up in a previous meeting, and so maybe we've got it all covered. Robert.

MS. WIEGAND: It looks like you're unmuted, Robert, but, for some reason, we're not hearing you.

MR. HULL: Maybe you can type it in, Robert. Try that, and we can read it then. James, go ahead.

MR. PASKIEWICZ: I guess this question would be for Chip. When will the council be looking to the advisory panel for its recommendations on the allocations between the sectors? When are we going to be asked to kind of give our guidance on that?

MS. BROUWER: James, I think I can probably answer that question. The council is going to be discussing yellowtail a little bit in June, and so I anticipate having more guidance from them and having more analyses for you all to look at at your fall meeting, but we're just getting started on this amendment, and so you're probably going to see it a couple more times.

MR. PASKIEWICZ: Thanks, Myra.

MR. HULL: Bobby Freeman, are you able to speak now? If you can hear me, you may want to type in your comment, if you would like. Okay. It doesn't look like we have any more hands raised, except Robert, who is having some troubles, and so it looks like we're there.

MS. BROUWER: It looks like Bobby is still trying to connect. Are you able to speak, Bobby?

MS. CHAYA: I will reach out to him, Myra.

MS. BROUWER: Thank you, Cindy. Mike, at this point, or Jimmy, the next item on the agenda is red porgy, and so, if you're ready to move into that, if you will just give me a second to put that presentation up, and I can be ready right away.

MR. HULL: I am certainly ready to keep moving.

DR. SCHMIDTKE: That works for me as well.

MS. BROUWER: Switching gears to red porgy, I think I'm going to be greedy and take over your whole screen, just so I can see my notes. Let me just sort that out, real quick. Here is red porgy, again, and you guys saw this at your last meeting, and so we've made some progress on this amendment, and so I will quickly walk you through it. Some of it's going to be familiar, and so it will be a repeat of what you've already seen, but we do have some new analyses to show you, and so I will review the timing of the amendment, recap what you guys said back in November, and then we'll go through the questions and comments that you had for the council and what came to be of that.

We'll do an overview of the actions and the alternatives, as they were modified by the council in March, and then, if there's any other recommendations, or you guys want to recommend a particular preferred to the council, now would be a good time to go through that.

As far as timing, the council reviewed your input and some preliminary analyses in December. Then we had scoping hearings in February, and we received a single comment. In March, the council reviewed some more analyses, as I said, and then, in June, they're going to review what you all say at this meeting, and hopefully we'll have some more information for them, and then the plan is to approve the amendment at that time for public hearings.

Back in November, when we looked at this then, you guys said the council should consider analyses looking at a closure for both sectors that would coincide with the shallow-water grouper closure in April through May, or January through April, rather, and, also, a reduction to trip and bag limits at the same time. You also mentioned that, for the commercial sector, red porgy may need to be managed under a bycatch allowance, but that it would be important for the commercial sector to have this fishery continue to be open, even if it's at a reduced level. We also talked about reducing mortality during the spawning months and adjusting the spawning season accordingly.

You guys made a couple of motions for the commercial sector to consider a range of trip limit options, from twenty-five to sixty fish, and so we'll be looking at what that would look like, and consider a closure only during peak spawning. There was also a motion recommending closing the recreational fishery for red porgy, as I said, alongside the shallow-water grouper closure. Then,

when red porgy is open, then reduce the bag limit to either one fish per angler per trip or two fish per angler per trip.

Here is where we get into the actions. The first one is rebuilding. As you may recall, red porgy are overfished, which means the council needs to put in place a rebuilding plan, and they have two years to do that, and so these are the rebuilding alternatives, and there is four of them, and the Alternative 2, where it says  $T_{min}$  (F equals zero), what that means is an alternative that would rebuild the stock under a scenario of no fishing, and, if that's the case, then the model predicts that it would take eleven years to rebuild, with a 50 percent probability of success, a little bit less than 50 percent.

Then you have two alternatives, 3 and 4, kind of in the middle of the range, and you have Alternative 3, which is  $T_{min}$  plus one generation, and one generation is just the time that it takes for a fish -- Between the time that it's born and when its offspring are born, or something like that, and I forget. That's why I needed my notes. So that turns out to be eighteen years.  $T_{min}$  times two is another option that we have put out there for the council to consider, and you just multiply eleven times two, and so that would take twenty-two years to rebuild, and then the  $T_{max}$  is the maximum time that, under the law, the council would have to rebuild the stock, and so you have to have at least a 50 percent probability of rebuilding, and that would take twenty-six years. The council has not selected a preferred under this action.

Action 2 look at the total ACL, and so recall that the ABC, the acceptable biological catch, comes from the Scientific and Statistical Committee, and so the council can't go above that level, and the ABC that has been recommended by the South Atlantic Council's SSC is 75,000 pounds, and so they have selected Alternative 2, which is in bold, as their preferred, which would put the total ACL at the same level as the ABC. That would also be the optimum yield, and the units there, as you see, are in pounds whole weight.

There is other options to consider for analyses purposes, if the council wanted to leave a buffer between the ABC and the ACL, and so we have Alternatives 3 and 4 that provide different levels of buffer, and I should note that these are levels that would be for 2022. They would be different numbers, because the ACLs would change over time.

For allocations, currently, red porgy is managed under a 50/50 allocation, and so that would put the ACL for each sector at 37,500 pounds. If you apply that allocation formula that I showed you earlier when we were talking for yellowtail, it turns out -- It produces a very similar split, 51/48, or 49-ish, and you can see what those sector ACLs would be, and so it's very similar, and then there's another option, if the council wanted to remove the allocations altogether. Now, this one would get a little bit more complicated, because you know we have accountability measures that are tied to each sector, and so, if they remove the allocations, they would have to revise the accountability measures accordingly.

I also put in there to remind myself to tell you that, as of February of last year, the commercial ACL for red porgy is allocated 30 percent to the first season, from January through April, and 70 percent to the remainder of the year.

There was an action in this amendment that got taken out, and this one was to adjust the recreational annual catch target for red porgy, and this is when we talked about, well, recreational

catch targets are not being used in management, and perhaps it's best to just remove them for the whole FMP, and the council said let's do it, and that's how that action migrated over to the amberjack amendment that we talked about this morning, and so there's not much to say about that here, and this is where we get into actions that pertain to management measures.

Action 4 would have several alternatives to change the trip limits, and so, under no action, we would keep what's in place, which is a trip limit of sixty fish from January through April and 120 fish from May through December. Alternative 2 would reduce that trip limit in the first season, and then you can see what the range is there, and so there's options from fifteen to forty-five fish from January through April, and then Alternative 3 would reduce the trip limit in the second part of the year, from May through December, and you have a range of alternatives for that as well, from fifteen to sixty fish.

This table shows you the estimated reductions from projected landings for all these potential trip limits, and so you saw a similar table to this one when I presented this to you back in November, and the percentages there are showing you the predicted change per trip, and it's color-coded. The blue colors are for the first season, and the brownish colors are for the second season, and so you can see what those percentages would be.

Here's where I hope this works, and we can migrate to this interactive tool that explores changes in landings and predicted closures under all these various trip limits, and hopefully this will work for me.

DR. COLLIER: Myra, you're going to the old link, and you need to go to the newer link. I will forward it to you.

MS. BROUWER: Thank you. Sorry about that. Well, while Chip is sending me the correct link, I guess I'll keep going, and we'll come back around to the analyses and play around with the tool. For the recreational measures, there are several different kinds of measures, and so what I have on my screen here is for bag and vessel limits, and the council wanted to explore different limits for different sectors, and so Alternative 2 is just the recreational bag limit overall, and so you have two sub-alternatives there of one and two per person per day, or per trip.

Then Alternative 3 looks at a vessel limit for private and charter vessels. For private and charter vessels, they're looking at a range between six and eighteen red porgy per vessel per day, or per trip, and then they also wanted to look at a vessel limit for headboats, and, for that, they're looking at a range between twenty and sixty fish per vessel.

DR. COLLIER: Myra, just to let you know, I did put the link in the chat box, and so if you wanted to go to it.

MS. BROUWER: How about this? How about we take a very short break, so I can figure this out, and then we can bring it back to you guys, because my computer is just not cooperating with me right at this moment.

MR. HULL: Sounds good to me. What do you need, five minutes?

MS. BROUWER: Not even, but sure.

MR. HULL: So everybody just stand by, or, if you need to break away for a couple of minutes, do it and come right back.

MS. BROUWER: Thank you, Jimmy. I appreciate that.

(Whereupon, a recess was taken.)

MR. HULL: Okay, everybody. We're back.

MS. BROUWER: We are back. Okay. Here is this nifty little decision tool that Chip and Jeff Pulver from the Regional Office put together, and so it has two tabs for the commercial and recreational, and so you can input your ACL options over here, and so there is the two options there, and the council's preferred for the commercial is 37,500 pounds, and so we'll leave that there, and here is where you can manipulate the various trip limit options, and so, right now, it's showing what is currently in place, and then the graphic shows you the predicted landings, and the dashed lines are showing you the commercial quotas for each of the two seasons, and so it looks a little weird with that cutoff in the middle, but that's what it means. This is the January through April season, and then May through the end of the year.

You can see where the landings would hit the ACL when they cross that dashed line under the current, and then you can manipulate the trip limits, and we can see that it keeps moving, and so, under a forty-five-fish limit for Season 1, it would look like that. If we go all the way down to fifteen fish, it would extend the season a little bit, but you would still have potentially a closure in Season 1. The same thing over here. If we go to half of what is current, and we go to sixty fish, that's what that would look like. If you go all the way down to fifteen, you're looking a potential closure in October.

That is what is in place for the commercial, and let me get back to my presentation here to finish telling you what the alternatives are for the recreational sector, and then we can play with the other side of the little tool.

This table here shows you the estimated reductions for private and charter vessels, and so this is for the sub-alternatives under Alternative 2, and you've got the vessel limits up top, and your bag limit alternatives, and then the percent reductions for the various modes color-coded, the larger reductions being the warmer colors. Then I will show you what the tool looks like, but this is part of what's being included. Then, of course, for the headboat, if you have the various headboat limits, as displayed, in combination with the potential per-person reductions, this is what you could be expecting, in terms of reductions for the headboat sector.

In addition, the council is looking at potentially imposing a recreational season, and so, right now, the recreational harvest is open year-round, until the ACL is met, or is projected to be met, and the options to possibly change that are to open harvest maybe January through April, May through June, July and August, and so various different MRIP waves, and so this graph shows you the predicted recreational landings by wave, so you can have an idea of what that looks like seasonally, and the predicted landings are shown in the dashed red line, and those are an average of the previous years that you see there on your screen, excluding 2018, because that year had a very

high percent standard error, and so the precision of the estimate was really not good, and so we excluded that from the analysis.

Here is where we go back to the tool. Let me bring that up, and I'll move over to the recreational sector, and it's the same sort of thing. You've got the waves over here on the left, and you can manipulate the bag limit over here, so it's at three, which is the current, three per person per day, and you have an option here to manipulate the private and charter vessel limit per trip, or the headboat, and then the preferred ACL, and so this is what things would look like if everything stayed the same and all we did was change, reduce, the ACL to the preferred.

You've got the landings in the solid red line, and the ACL in the dashed red line, and so a predicted closure would be sometime over here in May-ish. If you reduce the bag limit to two, and you make no other changes, there's a little bit more of an extension over here. If you reduce the bag limit just to one, again, it changes very little.

This is with the fishery being open year-round, and so, if we -- If the council were to choose just opening it let's say in Wave 3, and close the rest of the year, this is what it would look like, and so you can see that the confidence intervals, which is indicated there by the grayed area, are pretty wide, but the blue shows when the fishery would be open, and so you would still look, potentially, at an in-season closure, and it still doesn't get you to where you need to be. You can continue to play around and try to figure out which combination is going to allow the fishery to remain open the longest and not have an in-season closure.

Let me go back to the presentation and finish that up, so we can talk more about this and hear what you guys have to say. Action 6 would look at the recreational accountability measures, and this is one that has not been very -- We haven't had time to flesh this out too much. The council gave us some guidance, at their last meeting, and they're looking at potentially announcing the date the season would open and how long it would be, like is currently being done for black sea bass, for example, or for red snapper.

They're also looking at potentially changing the triggers that determine when the ACL has been exceeded and when a payback is necessary, and so they wanted to look at running averages that would be based on a straightforward average, from an arithmetic mean, or using the geometric mean to make these calculations, and so this is something that staff are still working on to try to figure out scenarios and bring the information the council would need to discuss this action in June, and that's it, and so that's a summary of Amendment 50, and so I would be happy to take any questions or go back to the commercial and recreational tools and hear what you guys have to say. Thank you.

MR. HULL: Thank you, Myra. I'm waiting to see who raises their hand, but I would just make a statement that, obviously, we're looking at huge reductions here, for both sectors, and, at our last meeting, I think we all pretty much agreed that we needed to try to keep the fisheries open as long as we could, with as many animals as we could catch to make that happen, and I know, on the commercial side, we definitely wanted to keep it open as long as we could by adjusting the trip limit, bringing it low enough -- With that tool, we could do that and see what the optimum is to get the most time we could get between the two seasons, and then, of course, on the recreational side, it looks like they're going to have to shut down some waves to get anything in a reasonable amount of time, and so maybe the recreational side needs to figure out when do we want this open,

and then, also, there was the option of shutting down during the snapper grouper shallow-water season too, to make some reductions there. Randy, you're up.

MR. MCKINLEY: Thank you, Jimmy. Obviously, this is going to be a bycatch fishery, and it's just sort of aggravating, because we fought so hard to get it open, to have that bycatch in January, and now it looks like that's going to go away, and I would think, definitely, that first one, we would want to go with a twenty-six-year rebuilding, especially because the problem with the porgy has nothing to do with actually catching them.

Maybe it will correct itself, and so I wouldn't want to go so extreme as trying to correct it as quick as what it was looking like there. I would go to twenty-six years, but, also, like this year, and I will be getting to that more with the b-liners, but the weather has been so bad, up here in North Carolina, and I don't know if it's cold water or what, but the b-liners haven't cooperated this whole spring, and I would just -- I would almost -- As bad as I hate to see it, I guess it would probably be better to close it January through April, and then open up in April, and so at least we could have something to go along when we start fishing for grouper in May, and that's why it's so important for that and the b-liners to be open in May. That's all I've got for right now.

MR. HULL: Harry, you're up.

MR. MORALES: Well, I would have to agree. You know, the recreational fishing, at least in South Carolina during January, February, and maybe into March, is a bit lighter, and so that may be -- That may help the fishery the best, compared to the rest of the year, but, regardless, I mean, what we're looking at is extreme, and so I would say, from a recreational standpoint, the rest of the year would be best. Thank you.

MR. HULL: Okay. Thanks, Harry. Robert Lorenz, you're up.

MR. LORENZ: Jimmy, I'm going to continue from the last meeting, because drastic things are necessary, but I will continue most strongly favoring for the recreational fishery to be closed during the snapper spawning season, and so no red porgy taken at that time. It's going to be difficult, and, if I remember, I think there's been discussion around this species, and it's been over ten years now, and I think we're getting to a point here where I think people have wondered if there's something going on with red porgy besides fishing that will ever bring these guys back, and is there some environmental factor or something going on where fishing probably isn't the only answer, and I think this is one of the species that we might want to try to find that kind of thing out.

MR. HULL: Myra.

MS. BROUWER: I will say, to that, Robert, red porgy, as I think we talked about in November, have shown really poor recruitment over the last thirty years, and so, yes, there is definitely something going on that is not directly -- Possibly not directly related to fishing that is going on with that population, and so yes.

MR. HULL: Thanks, Myra. It sounds like we have some recommendations, at least, so far, to close the red porgy during the snapper grouper shallow-water closure, and I think there was also a recommendation for the commercial sector to close then too, which could help extend the season,

obviously, but, commercially, when we're not fishing for grouper, we're fishing for vermilion, and so we do interact with red porgy when we're fishing for vermilion, and the point is to have this fishery -- Again, the statement that we all agreed is we don't want to close these fisheries down totally, and we want to take, as they said, the longest timeframe to rebuild them and try to keep them open, with whatever measures we have to take, but to try to keep them open as long as we can, with the tiniest bag limits, if that's what it takes, but keep them open seasonally as long as we can. Not only for the benefit of using the bycatch, but for data collection on these animals. Maybe there will be an intercept, and we can get some more information. Myra.

MS. BROUWER: Thank you, Jimmy. Just to remind the AP that the council recently allowed harvest in that period of January through April that used to be closed, and that was done to help alleviate the amount of discarding that was happening, and that just went into effect last year, and so there hasn't been very much time to figure out how that regulation has played out, but, certainly, you all know better than me the issue with discards in this fishery.

MR. HULL: We're going to be discarding a whole lot more, it looks like.

MS. BROUWER: I am just sort of typing away things that I heard you all talk about. If you would like to remind me of other things that you would like to pass on to the council, please do.

MR. HULL: Yes, ma'am. I am looking through my notes too, and I don't see -- I mean, it's just such a dismal situation they've put us in with this, the stock status has put us in, and so there's not a whole lot of options, and, obviously, the council has to put in a rebuilding -- I mean, they have two years to do it, and I don't know how much time they have left before that has to be submitted, and so, on the timeline of this, refresh my memory. When is this coming back, or when is this going to be finalized?

MS. BROUWER: This amendment should be finalized in March of 2022, at the latest. Regulations need to be in place, or the amendment has to be submitted, I should say, to NMFS before June of next year.

MR. HULL: Okay. Right around -- A little less than a year. Okay. So we'll see this again after the council makes some final recommendations, when they finally zero-in on what they're going to do?

MS. BROUWER: Yes, and this will come back to you, Jimmy, in the fall. I think, if you would like to go back, and I don't know if you're ready to make any recommendations on the various ranges of trip limits or bag limits, and I think the council may want information on whether the vessel limit for headboats is a viable thing, or the vessel limit for charter and private, and, if they were to look at an open season in the fall months, or in the spring, and which wave would be better for that.

MR. HULL: Right. I see Cameron, before we try to do some of that, possibly. Cameron.

MR. SEBASTIAN: I was just going to comment on those topics. For the charter/headboat, to me and my captains, it's probably easier to just have a per-person limit than a boat limit, just for tracking purposes, and the seasons -- We don't catch a ton here in South Carolina, but the seasons -- If we want to keep them closed during the shallow grouper closure, that means they would open



up in the June, July, August timeframe, and that sort of works with our biggest peak with customers, and it would give them at least another fish they could retain.

MS. BROUWER: Cameron, did you say June through August?

MR. SEBASTIAN: Yes. I mean, that's our peak volume time, and so when we have the most people down here. We don't catch a lot of them, but we catch a few, and they could keep one per person during that timeframe, and it's just something else that we can offer.

MR. HULL: Robert, you're next.

MR. LORENZ: I am just going to speak to the private boat recreational fishery. I would back what Cameron said, and, actually, from the standpoint of fairness, because I was thinking about, if you start getting into boat limits, from folks that are private boats, versus a headboat and a charter, what's a good limit? You know, what would be a good limit for the boat? It could be generous for private boats, and so I think, to make it look fair, I am going to back that, I think, more strongly for the recreational sector, that everybody just have a per-person limit and not necessarily go with the boat limit in the recreational sector.

MR. HULL: I would agree. I don't know you could have a boat limit on a headboat, successfully, if you have a big headboat. If you reach your limit on the boat limit and they keep catching them, it's going to get ugly. It's the same, I think, on the commercial side. If you close it during the shallow-water spawning, then we would open back up in April or May, and, with a really low trip limit, if we could possibly keep it open for most of the rest of the year, that would be good. Just try to keep it open.

I think you had the one option, on the recreational side, for the seasonality of it, during the summer months, and, obviously, that wave, and it looked like they were only going to get maybe a wave-and-a-half or something, without messing with that tool any more, but it was going to be short, even at one per person, it looked like, and so, if you looked at that wave analysis, and you had one per person, and you started after the shallow-water grouper closure, you got the color in blue, and so you're looking at May, June, into July, the first part of the summer season, and then you're closed until next year at that time, and so that's a pretty small timeframe, and I think the next wave, probably, if you opened it up later, say in July, with the same one-bag limit, you really don't gain much more time, but you just shift it going into the fall a little bit, starting in the middle of the summer and then going into the fall months, and so it's kind of like that's a decision that will have to be made.

As far as the recreational people on the panel, do you have any more thoughts about that, as to when you think they should have the season? It's going to be short, and when do you want it to start? I know, for me, I would say that probably the busiest time of year for boating and fishing is right there in the middle of summer, right around the 4<sup>th</sup> of July, and so late June and July, having it open, I think is probably important, but, Randy, you're up.

MR. MCKINLEY: Could we use the tool to put in fifteen fish for commercial, with the opening date of May 1?

MS. BROUWER: For the commercial sector, Randy, the council is not considering a spawning season closure, since they just took that away, and so that's currently not available through this tool.

MR. MCKINLEY: Then maybe start it from January, just to see how many months that's showing.

MS. BROUWER: So, right now, I've got fifteen fish for both seasons, and is that what you were asking for?

MR. MCKINLEY: Yes, and so it's closing sometime before -- Sometime in March.

MS. BROUWER: Correct.

MR. MCKINLEY: So, if they did consider the being closed during the spawning season, and it would open up on May 1, and just, assuming by that, then you would have two-and-a-half months, and so that would be May and June, and that would at least take you into July, where it would start over again, and you could come into October, which would be at least reasonable. I mean, it's not good. Fifteen fish isn't very good, but that still would be, I guess, the best thing, and so I would hope they would consider starting it May 1 instead of January 1.

MR. HULL: So we have put there to consider closing during when the shallow-water grouper are closed, which is what you're saying, and open up under a low trip limit in May, May 1, and I think that is --

MR. MCKINLEY: Yes, that's absolutely it.

MR. HULL: Then, on May 1, to try to keep it open as long as possible, and so it sounded like we might have three or four months, something like that, and I'm just -- You still have -- The tool still has that first section in there, the first season, the shallow-water grouper season. That makes good sense. Does everybody see these recommendations? If you have some more you would like to put in, raise your hand. I am not seeing any more hands, Myra.

MS. BROUWER: Okay. Thank you, Jimmy, and thanks, everybody, for your input. At this point, I think I will turn it back over to Mike to continue with the rest of the agenda.

DR. SCHMIDTKE: Thanks, Myra. All right. We've got recreational discards next.

MR. HULL: Okay. The recreational discards, as you guys know, is driving the closure on, for instance, red snapper, and the discards are closing the fishery, because the ACL is so small, and there's so many fish, that the discards are closing it, and so it's kind of a silly situation, but that's what we're in, and I think that there could be some discussion, and maybe somebody has a great idea on a way to reduce red snapper recreational releases.

Right now, the red snapper season -- These mini-seasons have been tiny, two or three or four days, and who knows what we're going to get this year, and we are going to get a presentation later on the results of the red snapper stock assessment, and you're going to be pretty surprised, I think, if you don't already know what they are, and so the only way you're going to ever get any more fish

is by reducing the dead discards that are being produced by the private recreational sector with the effort that they're saying is happening.

If you look, there's a document here which shows you the waves and the effort and what is landed and what is discarded. I mean, just to strike it up, from my point of view, I mean, the only way you're ever -- We've got descending devices, and we've got venting tools, and we've got best practices, and we're trying everything we can.

The only way, at this point, is to have either a time closure, or a spatial closure, maybe, and I don't even know what that will give you, to gain some time, again, kind of like the red porgy situation, when you really need landings the most, because, right now, you've got three days, recreationally, and, of course, that recreational is driving the commercial quota too, because it's making it where the stock is overfished, and so we're not getting any more animals. Anyway, that kind of is what this is about.

I know the council is interested in hearing if we had any recommendations, and I just made one, kind of, that we could talk about, and that was a spatial or a time closure, to try to gain something, and I don't know if it would gain us anything or not, and it would have to be analyzed, but I see some hands up. Andrew Mahoney, you're up.

MR. MAHONEY: I was just going to say that maybe we could offer up some kind of release system on a boat, like a live well, that you could let the fish acclimate, and then send it down using your descender after that, possibly.

MR. HULL: Okay. That's a good idea.

DR. SCHMIDTKE: Jimmy, before we get too deep into folks kind of brainstorming some of these ideas, do you want me to walk through the report?

MR. HULL: Yes, sir.

DR. SCHMIDTKE: All right. Chip and I worked together to put this report together, and it was kind of a quickly-put-together thing, and this is not the best and final data that is available out there, and there would be more extensive analyses that would be done in something like an amendment, but this was really pulled quickly and put together to try to help initiate some of these discussions, to try to give some ideas of where the data are right now that we have that are kind of pertinent to this discussion, and then you all could take it from there, to come up with some ideas and recommendations for the council.

I am more or less going to be walking through these figures, because that's the bulk of the content that we're looking at here, and the first table that is in this report shows the release mortality rates of red snapper. In developing this report, we focused primarily on the estimates of dead releases, and so we took the releases, as estimated via the MRIP-FES, and we multiplied the mortality rate, the release mortality rate, from the assessment by those, to get the estimate of the releases from red snapper that are dying.

With this mortality rate, the last stock assessment blocked it into different years, taking into account the different improvements that have been made on things like descending devices, from

a technological standpoint, as well as the changes in fishing behavior and practices, with those being put in, and so you'll see that the mortality rate, looking at it pre-2010, was estimated at about 0.37, and, as you go through the time periods, it gets lower and lower, and so a lower portion of those fish that are being released recreationally are estimated to die from that catching process.

Looking at this as we go through kind of a time series standpoint, from 2010 through 2019, just to give an idea of what has happened in that timeframe, you can see the estimated dead releases in the blue, and the years that -- This lined pattern, those indicate years where there was not a red snapper season at any point within that year. The years that had mini-seasons are shown as the solid blue bars, and then, in orange, you see the landings, and so you see the landings are quite a small portion of the removals, and more of the removals are coming from the dead releases.

We also took a look at the different recreational components by wave, and so considering the charter portion, and this is what we see by wave, and we did distinguish, in these wave estimates, the years when there was an open season, versus those when there was not an open season, and then we have the landings in those corresponding waves, and so we see the landings there in blue, the estimated dead releases from the open years in orange, and the estimated dead releases from the closed years in gray.

We did the same thing for the private component of the recreational sector, and the same color pattern. The landings are in blue, estimated dead releases from years when there was a fishing season are in orange, and those from years when there was no fishing season are in gray, and then the general recreational fleet is the combination of those, and, of course, the private component is one of the primary drivers. You can see, just from the change in the scale, the private is numbered in kind of the tens-of-thousands, up into the low hundred-thousands, whereas the charter only reaches up to about 10,000, at its max, for the estimated dead releases.

That's kind of the data that we threw together for you all to consider, from a time component. We were not able to, in the time that we had to put this together, consider a whole lot of the spatial component, like Jimmy has brought up, although that's something that, as you all develop your ideas and your recommendations, and the council considers those, moving forward, that's something that could be put together at a later time, and so that's all I had, Jimmy, and I'm going to go back to the -- I guess I will record some notes at the bottom of this page, based on recommendations brought up.

MR. HULL: Thank you, Mike. Andrew, you're up.

MR. FISH: This is just a suggestion, but it seems like, May 1, everything opens back up, and everybody is excited to go fishing, and everybody goes fishing. If you could coincide the red snapper opening, commercial and recreational, on May 1, you're going to have all those people going fishing and getting it out of their system.

It seems like, when we wait until July, there is hundreds -- Just out of Port Canaveral, if not over a thousand boats, in three days, just at the boat ramps, that will go red snapper fishing, only red snapper fishing, and they're all going to the red snapper spots, and I can only imagine how many red snapper they're catching, and releasing, and it's all because of the bonanza from not being able to fish for them, and I know it's understandable, but that was just my take on it. I know the weather is not all the great in May, as far as the sport boats getting out, but I think that would alleviate a

lot of the bonanza and the mortality, which is, theoretically, already existing on May 1. That's just my opinions, and I was wondering what you all thought.

MR. HULL: Thanks, Andy, and so he's typing that note in there now. A May opening could alleviate the big start to the fishery in later months. Robert Lorenz, you're up.

MR. LORENZ: These recreational discards are getting so frustrating. I'm going to get a little bit out of the box here, with something that might be considered a little goofy, and please, all recreational fishermen, you can chew it up if you want. As long as anybody is fishing, you are going to have bycatch and discards, and so the only way we have dealt with it, to date, is you fish or you don't fish. The more you don't fish, the less you're going to discard.

If we're going to fish, we're down to the bottom of any sack of ideas, and the only things that are starting to be left would be you have circle hooks, and mandate the largest possible, and that saves the smaller fish, but it looks like the biologists want to see the bigger fish in the population, and so that's large hooks. The second thing is you can go to a single-hook rig. Maybe a single-hook rig is all that's allowed for recreational fishing, a single-hook rig and a large hook.

The next option you have is making them a little harder to hook, or a little harder to get to hook, and, if you have a circle hook in there, you don't damage the fish, and so you get as little leader as possible, like I think, in Florida, they have a thing called a -- Here, in North Carolina, for a trophy drum, we have a trophy drum rig, with a large circle hook, and I think a leader of no more than six inches and then attached to a heavy weight. That's something that might be able to be done. The last thing is no natural bait, and you jig, and so there's a few things that I will put on the table for discussion that reduce dead or a lot of discards, and it makes fishing a little bit harder. That's where I am, and that's what we're down to, other than to not fish.

MR. HULL: Thanks, Robert. He's got that typed in now, and those are some good ideas, and, like you said, every time you put a bait down, if you're fishing for -- Even if snapper is closed, and you're fishing for anything else, you're going to catch red snappers, and so it's pretty limited what we do, other than we have a spatial closure, or a time closure, like we said. Even the time closure isn't going to do all the job, but it would do some, and then, when all this started, years ago, they were going to shut down the bottom to bottom fishing at different depths, and so, obviously, the deeper you go, the barotrauma is worse, and so, I mean, there's ideas there too, to shut down area to gain something. Harry, I see your hand. You're up, sir.

MR. MORALES: Yes, sir. Well, I really, really struggle with this one, given the fact that I can't find any offshore fishermen, commercial or recreational, that say, in this last several years, that they've had a problem catching a red snapper. In fact, the biggest problem is getting away from the red snapper. Robert, I like your ideas, and I'm not sure about the big hook or a single rig, because, hell, we use chicken rigs to catch b-liners, and we end up catching a red snapper, and I am inclined to say that the natural bait -- The more natural bait you have on the boat -- If you're sending it down a hundred, or 150 feet, or 200 feet, yes, you can, more than likely, end up with a red snapper on the other end.

I think that, while we think that everybody might have descending devices on their boats, from my assessment, I am still running into fishermen that don't, in all honesty. They just don't have it, and I think a stronger, more concerted effort at educating, whether there is YouTube videos on

proper ways of releasing these fish, so that they have a better chance at survival, but, when you've got a red snapper whose bladder is completely hanging out of his mouth, good luck. I don't see how that fish is going to survive, and I don't care what you do. I don't believe he is going to survive, and so that's it.

MR. HULL: Thanks, Harry. Andrew Mahoney.

MR. MAHONEY: Is the release well thing not a good idea? I don't know.

MR. HULL: No, and now is the time. Say it again, Andrew. We weren't ready when you --

MR. MAHONEY: Okay. A release well for the fish, to kind of let them get acclimated, and then hook them up to the descender after that and send them down. That way, you're not just throwing a fish that's limp and not moving at all. Most of us have pumps all over our boats, and so, anyway, that's all.

MR. HULL: Okay. He's got that typed in now. Release well to hold fish before descending it. Cameron, you're up.

MR. SEBASTIAN: Going to the season, for us in the Carolinas, if the opening would be non-peak, non-July, then it gives us something to give the angler sort of to go for. I mean, it doesn't matter what's open in July. Everything is going to be packed, and everything is going to be sold out, no matter what, and I think it would spread out somewhat, like the gentleman alluded to down in Florida, that you've got 3,000 boats, and they're all catching tons of American reds, and you're not sure exactly what's going on.

It's sort of -- In our area, at least, the guys who really fish would go out and target during those sort of off-season weekends, and, if you get blown out, then you can look at rescheduling and redoing them down the road. Up here in the Carolinas, I would say we catch the majority of them between sixty-five and ninety feet, and they're thick as thieves out there right now. The good thing, for us, is the majority of them survive when we throw them back, because it's relatively shallow water.

MR. HULL: Right on. Thank you for that information. He's got, again, seasonality and depth. Your depth that you're fishing, obviously, is the shallower, and so you don't have as much barotrauma, and then the seasonality of it -- You recommend not opening it up in the peak, in the middle of the summer, but open it up in the fall, so to speak.

MR. SEBASTIAN: Or the spring. In the fall, you get the hurricanes and the tropical storms, and so spring might be a better time.

MR. HULL: I get it. There's other things that occurring during mid-summer, and why throw snapper into the mix, when you could use it there. I get it. David.

MR. MOSS: Thank you, Jimmy. A couple of things. Number one, and just kind of playing devil's advocate here, but, if you have both red snapper and grouper opening at the same time, and I'm a recreational angler, but I'll speak for the charter guys a little bit. Wouldn't they prefer to have two different seasons, so that they can kind of book charters on two different events, number one?

Number two, the other thing that I would ask, about why it's opening in mid-summer, is I seem to remember, a few years ago, when it was open in the fall, and I want to say it was November, when we had our first, quote, unquote, red snapper season, and it was blowing so bad that nobody could get out, and so all the groundswell from that, and groundswell meaning pushback from the anglers, was put it at time where there is -- Because we know that we're going to have such a short season, put it at a time where there's more of a guarantee that people can actually get offshore, which is why it went to midsummer, when you've got the better chance of favorable conditions.

The other thing that I will throw out there, just as something that this kind of screams to, for me, is if you -- Like off of south Florida, for instance, on any Saturday or Sunday when it's somewhat flat, if you look offshore, we don't have any kind of beginning to grasp how many anglers there are out there, and it just keeps increasing, and I am in no way advocating to limit that at all, but, until we can understand really how many anglers there are out there, we're going to be fighting an uphill battle, and this just, to me, keeps pushing for the need for -- I mean, I know we've talked about it, but the permit or survey, whatever we want to call it.

I know the State of Florida is going to the Reef Fish Survey statewide now, but, from a regional perspective, I mean, we really need to figure out what it is that we're dealing with, from a participatory standpoint.

MR. HULL: Yes, sir. I agree, and, as you know, we've asked for that for a long, long time, that they do some type of accountability of the universe of private recreational anglers that are fishing offshore in federal waters for reef fish, and so maybe one of these days -- It's still there, and they haven't gotten rid of the idea, but they've just put it on the side-burner, and so hopefully something will happen.

MR. MOSS: This, to me, just screams that we really need to understand how many people are out there, because, the more and more people that we have accessing this fishery, and I think the descending device stuff -- It's come a long way, and you can see that the percentage of dead discards is down, which is fantastic, but, until we understand how many people are really out there, we're fighting an uphill battle.

MR. HULL: Well, I agree, and, I mean, at some point, we're going to have to maybe realize that the private recreational fishery has reached its -- It's overcapitalized, and you're just going to have all these stocks close, because it just keeps getting larger and larger, and there is no end to the participation, but there's certainly an end to the natural resource that we're going after, and so I don't know. I mean, it's -- We're headed in the wrong direction on this one, but we'll see what happens.

DR. SCHMIDTKE: Sorry to jump in, but we just kind of had -- I just kind of saw messages that were in the question box, and so I think this pertains to the release well, of the holding fish before putting them on a descending device, and that could run into some legal issues, with the thought of holding a fish on a vessel while it is illegal to retain the fish, during a closed season or something like that, and so that could potentially create some problems.

MR. HULL: Okay. Andy Fish.

MR. FISH: Well, I did also want to say, which we've all mentioned before, but just not in this meeting today or yesterday, but July is the heart of spawning season. All these fish that everybody is so proud to catch are all laden with eggs, and it's -- That is one of the problems that I have with the July as well, and, as to the live well thing, I think it's -- I would like to say that I was a diver medic for fifteen years, and I'm real familiar with barotrauma. I am not saying that I'm a fish barotrauma diver medic, but my opinion on that is that I think the fish needs to go back in the water as fast as it can. I think, any time that that fish, without the pressure on it, is time and bullets in the revolver against him. That's just my opinion.

MR. HULL: Thanks, Andy. Chris, you're up.

MR. KIMREY: Real quick, on the barotrauma, what Andy just said, that's 100 percent accurate. I've been a dive master for twenty years. The longer you have that fish out, the more the barotrauma effects are going to be increased, and so, ultimately, we should push to get the fish back in as soon as possible, and not retain him, because all you're doing is amplifying the effects of that barotrauma.

Secondly, it sounds like, to me, if the fish are spawning in July and August, and, obviously, I'm not 100 percent sure that that's the case, but, if it is, for us here in North Carolina, and I'm a charter guy, and I spend a huge amount of my time with my clients pursuing shallow-water groupers in May through the fall, and I'm just like everybody else. We see a lot of red snappers, and we try to fish around them, and we try to stay away from them, and sometimes it's just not possible, and so we do the best we can with our descending devices to get them back in the water, and I will tell you that I've had great success, the past few years, with my descending device, versus venting prior to that, and so that gives me kind of a good feeling.

Whether it be commercial or recreational, our shallow-water grouper opens on May 1, and so why wouldn't it make sense to have the season prior to May 1, when everybody is shallow-water grouper fishing, and I don't know about everywhere, but, here, if we had our recreational season, if they gave us three or four days, and we did it three or four Saturdays prior to shallow-water grouper opening, that would be that many more snappers that are collected and taken away from the ACL, and hopefully the discards would be properly released, prior to shallow-water grouper, and so we're getting our ACL before people are going grouper fishing.

It would also give us an opportunity to have something else to sell, on the charter side, prior to shallow-water grouper opening. Now, there's a lot of rough weather in April, but there's also a lot of times that we could get to where we need to get to catch these fish, and, again, I can't speak for everybody else, but I'm just speaking for my area, and it would be the same way with commercial.

If you would allow the commercial guys to fish, if it doesn't interfere with the spawn, prior to May 1, then they could catch whatever the commercial limit is that's been established prior to shallow-water grouper opening up. You're taking those fish out of the way, and they're being properly utilized and counted prior to grouper opening on May 1, and so it's that many more fish. You've taken them out of the way, so you don't have to worry about hurting them in the future, and they're already gone, and you're not having to fish through them once grouper season opens, or once the recreational guy is b-liner fishing with his chicken rig, or whatever, and so it's kind of like you're getting part of the fish out the way before people start -- Because I know, in May, for me, a lot of



times, some of the same areas -- Because I fish a lot of shallow stuff, and, most times, I rarely fish past 120 feet, and, a lot of times, I'm fishing to seventy to inside of a hundred foot, when I'm gag fishing, and we run into lots of snappers, and, a lot of times, the areas that the gag fishing is good can be really close, or we're on top of the same areas for the red snapper.

If we were able to get a few of those fish out of the way, and go ahead and get our ACL for the year out of the way, prior to grouper opening, it seems like it would be protecting -- Not really protecting, but eliminating part of the potential dead discards when shallow-water grouper opens, and I have always wondered why the season was July, and the only thing I could figure is maybe it's because it corresponded with the tourism. I mean, I don't know, and does anybody have any feedback on that?

MR. HULL: Chris, I do, and it was because of the weather, and the weather was best at that time, for most of the private recreational fleet to address the fishery in the ocean, and it was based on good weather conditions.

MR. KIMREY: I would disagree. For us, in July, we obviously get some good days, but July and August is when we get our prevailing southwest winds, and there has been numerous years, since they've had these mini-seasons, that I will book every single day to go snapper fishing with my -- Usually, it's with my previous clients, because they've been with me before, and we've had to release so many, and so I can literally send a few text messages, and I can book every day of the mini-season, and I rarely ever get to fish more than half of those days on my center console, because of the weather. I think it's -- For us, it's easier to get a better day in April than it is at the end of July, because of the prevailing southwest winds we get, and I know that some of the other guys here would probably agree with that, that are in my area, and I just can't speak for everybody else in different locations.

MR. HULL: Well, I think your comments are great, and there's a lot of people in Florida that will agree with you, both commercial season and recreational, and I like the idea of getting it out of the way before the big push of the shallow-water, and the good weather, and a lot of people -- Like Andy Fish said, all they really care about was the snapper season, period, and so get it out of the way and over with, and maybe they won't fish any more for a while, but that's on the private side, and so I think you have great comments. Richard Gomez.

MR. GOMEZ: What I was going to say was already covered, and so I put my hand down, or I thought I did anyway.

MR. HULL: No, it's still up, but thank you. Okay. Harry, you're up.

MR. MORALES: I think I've got more of a question for the group that's been around longer, and, given the fact that we're down to two, three, or four days in an entire year to fish, and, for me, from what I know about red snapper, spawning goes everywhere from May to October, and so fishing, November to February and April, in my opinion, and I agree with everybody else, is a better time for red snapper. The real issue, for me, is why haven't we gotten to where there is a snapper tag? If I've got a snapper tag, then I could fish the day I want to during the season that you have told me is legal to have that red snapper, as opposed to saying it's got to be on this given day, this Friday, and this other Saturday, regardless of what the heck the weather is doing.

MR. HULL: Right. I think that the tags -- Certainly, they've been talking, and you said people that have been following this a long time, and I have, and the tag has come up as a recommendation to manage the red snapper fishery with a tag. They had all kinds of difficulties figuring out how they were ever going to do that.

MR. MORALES: Really?

MR. HULL: Yes, and it was like who is going to issue it, who is going to pay for it, who is going to manage it, who is going to -- I mean, it was on and on and on, and so it got nixed, but I think that would be a really good -- In my personal opinion, I agree with you. It would be a good way to manage whatever fish are available to people that only want to go red snapper fishing, but that's not going to eliminate the dead discards of red snapper while you're fishing for black sea bass or triggerfish or any other bottom species, because you're going to catch red snapper no matter what, and so that's -- Then, with these new estimates of recreational effort, the FES currency, all of these numbers are growing bigger and bigger, and we've made some good recommendations here to try to -- Okay, how real are these numbers, and we need to know, and we need to have a license or a permit or some accountability, so that we can zero this thing down further, rather than these estimates, and it's a tough situation. Everywhere you look, we've got tough situations to deal with here.

MR. MORALES: I've got it, and here, in Beaufort County, South Carolina, we have the Waddell Institute, and they have done a tremendous job in bringing back the cobia and the redfish, and is that absolutely impossible to do with American red snapper?

MR. HULL: I'm not sure I understand what they do, the institute you said and what they do.

MR. MORALES: The Waddell Institute captures a breeding female, and the fishermen go, and we work as a team. You capture them, and they end up raising the cobia, and then they release thousands of them into the water every year, and they've been doing it for a couple of decades, and, in our area, I mean, you've got some damn good cobia fishing here, and you've got some great redfish, and so, if these red snappers are so damn scarce, which, again, I'm not -- I'm hugely skeptical of it, but, okay, you say that they're scarce, and then why don't we have a proactive program with them and with the red porgy? I mean, you don't have to stop there.

MR. HULL: I've got you, and he has put this as a note. Would a stocking program work for red snapper and other reef species? I think he captured it right there. That's a good idea.

MR. MORALES: Let me tell you, Jimmy. When they come into our area, I mean, they come back. The fishery goes -- The people go crazy.

MR. HULL: Well, it's -- This has been going on since 2009, and, when you get the assessment report, you will see what's going on, and, in the meantime, it has to go to the SSC and be considered the best available science yet, but that's usually a rubber stamp, but we'll see, and we're going to have -- If we're lucky, we will probably get the same season that we've had, if we're lucky, and, if there's a way that we can reduce the private recreational dead discards, which is what we're talking about, I think we could see more animals, but, until then, or better science, and better stock assessment results, we're really --

The fishery is being held hostage by the stock assessment, basically, in my opinion, but that's what it is, and that's what the law says we have to go by, and so, in the meantime, we've got to figure a way to try to get the most we can get with what they're giving us, and that's why we're having this discussion, and so, if there's nothing further, I think we have made some good recommendations, and the council asked for some recommendations and some ideas, and there's a bunch of ideas here that I certainly never thought of, and so I think it's good. I think we did good on it. If there's nothing further there, I will defer back to lead staff, Mike.

DR. SCHMIDTKE: Jimmy, just before we move away from this, I do have a question, given some of the later comments that were made and the possible illegality of this, and do we want to take off this release well recommendation?

MR. HULL: Well, I think yes. If it's illegal, you may want to do that, but why don't we ask -- I think that was Andrew Mahoney. Are you there?

MR. MAHONEY: I think take it off, too. I was kind of asking, and those other guys that were talking about barotrauma pressure kind of dialed it in a little more there, and so I think take it off.

MR. HULL: Thank you.

DR. SCHMIDTKE: All right, and so I think we have a good set of comments and recommendations within that to go to the council. I'm going to move this off, so we can move to our next agenda item, Jimmy, and I think we can fit one more in before the end of the day.

Next up, we have the vermilion snapper commercial trip limit discussion, and, here, I will show the document, the discussion document, that was put into the briefing book. From September through March, September of last year through March of this year, an emergency rule was in effect that increased the commercial trip limit for vermilion snapper from 1,000 pounds gutted weight to 1,500 pounds.

Normally, the trip limit is 1,000 pounds, and it gets reduced to 500 pounds if 75 percent of the seasonal ACL is met. Vermilion snapper, the commercial fishery, has a split season, where, for the first half of the year, January through June, 50 percent of the ACL is allocated, and then, the second half of the year, July through December, 50 percent of the ACL is allocated to that portion as well, and there is carryover from the first season to the second, if there is unused ACL.

We had this emergency action go into place, and we included, kind of later on in this document right here, the report that was developed as the rationale for this emergency action that eventually was passed and put in place. The increased limit expired in March, and the council is considering and looking to the AP for feedback on whether action should be taken to change the trip limit on a more permanent basis.

At the beginning of 2020, vermilion snapper were being landed at a much slower rate than normal. With the increased trip limit that was put in place, preliminary landings eventually reached 81 percent of the commercial ACL, in respect to that full year. Scrolling down a bit and looking at some of the past information that we have, Table 1, this looks at past landings, and it shows that landings from 2019 and earlier pretty frequently bumped up against those seasonal quotas.

Scrolling down then even further, to the analysis that was conducted last year, right here, we want to look at kind of the projections portion of it.

For the considered alternative, for that 1,500-pound trip limit to be in place for all of 2021, that predicted the Season 1 quota to be met earlier in April, on April 19 of this year. For the 180-day increased trip limit, and this ended up being what was selected, that was in place through March of this year, and that predicted a closure to occur for the first season on the 26<sup>th</sup> of April, and what we have seen kind of play out through 2021 is, as of today, vermilion commercial landings -- I looked it up, and they are at 31 percent of the Season 1 quota for this year, and note that that does include about two-and-a-half months when that 1,500 trip limit was in place, but the current trip limit is back down to 1,000 pounds, after the expiration of that emergency rule.

What we're looking at here is we have two years that were much slower than years in the past for vermilion harvest, and we also have consideration that COVID may have impacted the fishery, and so feedback that would be helpful for the council is whether you all think that the increased trip limit, or some other type of trip limit adjustment, would be a potentially helpful and sustainable long-term option that you would like them to consider, and that's all I have, Jimmy, and we can turn to the AP for feedback and recommendations.

MR. HULL: Okay, AP. Do we have anybody that has some initial comments, questions, or recommendations on this? Andy Fish, you're up.

MR. FISH: I'm not really sure why this one got special COVID attention and none of the other fisheries did, but that's just a thought, but, as far as the b-liner guys that I know, I'm pretty sure they start at forty miles and go out to sixty miles, and that's just to get to the depth of the water that they like to fish, and where they catch the better b-liners. Most of these boats are seven to nine-knot boats, and I think these guys need bigger trip limits, just on the distances they go and the type of boats they are and the type of fishery it is. They might have to drive around for a day-and-a-half just to find the right school of fish that's actually biting, and I think these guys need every benefit, as far as a bigger catch, and they deserve it. That's it.

MR. HULL: So you're definitely wanting to see a higher trip limit.

MR. FISH: Yes, and I think it's the most efficient way to do it for the distance that these guys have to travel and the type of fishery that it is. It's a nigh fishery, and it's -- The cards are stacked against those guys, and they put in the time and the distance and manpower and the bait, and I think it kind of makes sense for the trip limit to be larger.

MR. HULL: Okay. Thank you, Andy. Randy, you're up.

MR. MCKINLEY: I want to just go through some stuff and then ask a couple of questions. This is sort of what I've been waiting for. This is so critical for us. I mean, up in North Carolina, the red grouper is closing in May, and then it looks like the red porgy and snowy are going to get hit, and so, I mean, it is absolutely critical that we're able to fish for these b-liners and triggerfish.

I mean, I guess, with the exception of a few dayboats, or outboards and stuff, there is no one up here anymore that calls themselves grouper fishermen. Our bread-and-butter is the b-liner and

triggers, and that's definitely our primary target species, and I remember, fully well, all the closures we had from 2009 to 2017, and so I am absolutely totally against raising this to 1,500 pounds.

I mean, to me, we need the step-down back in place, and I had argued against it, and the council changed that. I mean, this past week, it was finally the first time, this whole year, that we've really seen a lot of b-liners, and I know this year is different, but, gosh, it's just so critical that we have b-liners in May and June, and, a lot of those years, we lost them in April, and so my question here is where did this come from? Was this done by NOAA, or was this done about COVID, or was this a recommendation from the council?

DR. SCHMIDTKE: As far as the emergency rule, this is a place I might need some of the staff that were on a little bit earlier to fill in, but the question coming to the AP now is from the council, because the council has been getting feedback and was getting questions, around May, when that increased trip limit expired, and the council was getting questions of is this going to get extended, and it was in place at the end of the year, and are we going to continue forward, and why is it not able to be extended, and the reason why is because there was no long-term action being worked on at the time, but that did give an indication to the council that -- It at least asked the question of is that something that should be considered in a longer-term capacity.

MR. MCKINLEY: Well, I mean, there could have been a lot better ways to help more people in the fishery, and one of them could have been like increasing the trip limit for bass this winter, or allowing some kind of bycatch on all of our species, and then this leads me into my next question. How many boats actually benefitted? I know they used the study for boats that had over 900 pounds, and I would sure like to know how many of those boats had the 900 pounds and then how many boats actually went over the thousand pounds during this opening. I mean, it sounds like, to me, that this is just benefitting a very, very small percentage, or number, of the permit holders.

MR. HULL: Good points and good questions.

MR. MCKINLEY: I mean, I've got another thing I would like to say on that. Most of the boats that we deal with up here are one or two or three-day boats, thirty-five-foot or less, and you don't have the capacity for fifteen boxes of b-liners, because you're not just going to catch b-liners. You're going to have jacks, and you're going to have grouper, and you're going to have triggerfish, and you're going to have everything else, and so, I mean, even at ten boxes of b-liners and everything else, you're going to be pushing fifteen or twenty boxes, and so I feel like the number that's being benefitted by this is just a very small number of the fleet. Most of your bigger five-to-seven-day boats are gone. I mean, they're definitely not in our area, and so I would be very interested to know how many people actually took advantage of that.

MR. HULL: We have that written out now, that question.

MR. MCKINLEY: Okay.

MR. HULL: Keep going, if you have more.

MR. MCKINLEY: No, and that was it, and I'm just strongly opposed to that. I mean, I know we had two years of bad weather, but the only way I would be for the 1,500 pounds is if we go back

and put the step-down in place also, and it would just be terrible if we lost May and June. It's just so critical for us.

MR. HULL: That may be something we need to put -- Okay. He is. To put the step-down back in if they went to the 1,500, so that we don't have an early closure.

MR. MCKINLEY: Absolutely. That's it.

MR. HULL: Understood.

DR. SCHMIDTKE: Just to make sure this is clear, would it be stepping down to 1,000 or stepping down to 500?

MR. MCKINLEY: Well, I would like to see it, maybe at 50 percent, go to 1,000, and then maybe, at 75 percent, go to 500, just to keep it open.

DR. SCHMIDTKE: Okay.

MR. HULL: There. Okay. That looks good. Vincent.

MR. BONURA: I was going to agree with Andy there. I would be all for the 1,500-pound trip limit there, because of the cost of expenses and the fuel and groceries and bait and everything that's been going up and up, and rather quickly. The cost of living is up, and our crews can barely make a good wage off of little trip limits to pay their bills and their family life at home. I would agree though on the step-down at the 500-pound step-down, and that's it.

MR. HULL: So you would like to see an increase to 1,500 pounds, but you would like to see a step-down at what percent of the ACL?

MR. BONURA: I would say about the 75 or whatever would keep it as a reduced bycatch fishery until the end of the half-year, and then, when it reopens, it would reopen at the higher trip limit again.

MR. HULL: Okay. Chip.

DR. COLLIER: Thank you for recognizing me, Jimmy. I just wanted to follow-up on a couple of comments that were made by Andrew and Randy. The reason that vermilion snapper were chosen for a species, due to COVID, is we were looking at the landings coming in within the commercial fishery, and, for some stocks, it did not appear that the landings had really slowed down, as far as the amount of harvest coming in, and some species were getting close to their ACLs, and so we didn't want to increase harvest on those.

Some other stocks, we were seeing potential declines in the population abundance, looking at some of the trap index of abundance, and so those weren't considered. It really left us with only vermilion snapper and potential changes in management to vermilion snapper, and so that's the reason why vermilion snapper was chosen. I can get a paper that we developed, staff developed, in regard to this and send it to the AP. It was put together pretty quickly, and, unfortunately, it was not able to go to the AP for their review and their comments.

The second point that Randy had brought up of why are they considering continuing on with this, I just went back into the monitoring of the annual catch limits from SERO, and it's looking like the first season, which is January through June 30, the ACL -- Only 31 percent of the ACL has been harvested, and that's one of the reasons that the council has indicated that they might want to consider upping the trip limit. Last year, I think a very small portion of the ACL was harvested for vermilion snapper, and, this year, it seems pretty low as well, and so that's the reason why they're considering it, just to fill you guys in on some of the questions that were asked. Thank you.

MR. HULL: Thank you, Chip. I appreciate that. Cameron.

MR. SEBASTIAN: Just a question. What is the lifespan of a vermilion snapper, and does that have to do with increasing the catch? I mean, you don't want to have fish out there that are dying naturally when we can harvest them and take them out, and does anybody have a life span on the vermilion?

DR. SCHMIDTKE: Cameron, I don't have that right now, but I could --

MR. SEBASTIAN: I mean just ballpark.

DR. COLLIER: It's in the FPR report. Let me pull that up, and I will get it to you. Hold on one second.

MR. SEBASTIAN: While he's looking for that, for commercial, I agree with Randy that we don't want to get ourselves in a position where the season closes because we have higher trip limits, and so, if they're looking at raising the poundage of fish, then definitely I would say that a step-down needs to be in place, because the worst thing that can happen to the commercial side of the industry is not to be able to fish at all for a certain species and be able to stitch a trip together catching multiple species while you're out there, and so that's the worst scenario, is you have a closure of something so important like vermilion.

MR. HULL: I agree with that, from a Florida perspective, also. If you did have the increased trip limit, you have to have step-downs in place, so that, if everybody is starting to catch a lot of fish, we have to not close the fishery early, and we have to reduce it back down. It makes good sense, and that's why the step-down is used for that.

DR. COLLIER: Jimmy, just to follow-up on Cameron's question, in the last stock assessment for vermilion snapper, they indicated that the maximum observed age was nineteen years old.

MR. SEBASTIAN: Thanks.

MR. HULL: A lot older than I thought they would get. Okay. What do you all think? We've got some recommendations here. Do you want to add some more to them? Do we have some more to say about this? I am not seeing any hands.

DR. SCHMIDTKE: Okay. If the AP is all set, then this information can be reported to the council, and this should be able to at least give them some feedback, and there is kind of this

recommendation right here of, if they decide to go to 1,500, then consider that form of a step-down along with it. That's something that they can potentially work with in a future amendment.

MR. HULL: We're moving right along, Mike.

DR. SCHMIDTKE: Yes. That being the case, coming back to the agenda, the next item is the council research plan, and we're kind of in the homestretch here, and so, Jimmy, I guess I would put it to you. I'm pretty sure that the folks from -- We have a couple of extra staff that are going to be giving information on SEDAR and Citizen Science, and they were planning to do that tomorrow morning, I believe, but the next item that we would look at is the council research plan, and that may take us to the end of the day today.

MR. HULL: Let's do that, and then we'll have hopefully a nice quick, easy morning of it and be able to carry on about our business.

DR. SCHMIDTKE: All right. Chip, do you want me to send presenter over to you?

DR. COLLIER: If you give me just a minute. I accidentally closed out my hands-raised document, and so let me pull that back up. Every two years, the council reviews their five-year research plan, and I know that sounds a little awkward, but we try to get these things updated pretty regularly, even within the timeframe of five years, and that helps to get things really adjusted for the SEDAR assessments that are coming up, as well as potentially change due to some management actions or some observed things in the fisheries as well.

The first one is really concentrating on information that is needed for stock assessments. You can see the first one up there is for gray triggerfish, and so that's going to be age determination, and we need some information on that. We're looking re-ageing some spines or other potential techniques for ageing gray triggerfish, and we have a research track assessment coming up in mid-2022, and so we do need this addressed pretty quickly.

For black sea bass, we have an operational assessment that's coming up in mid-2022, and I do have it indicated there that it's to be developed. Since then, I have kind of talked with other staff, and we're considering taking this out and moving it down into some of the long-term management needs, just thinking that we're not going to have time to get things adjusted for that next stock assessment coming up, and the same thing for the red grouper assessment and vermilion.

What we're really thinking about looking at is the black grouper assessment. In the last assessment, there was some misidentification of the gag landings, and so that really needs to be addressed for this species. When you're thinking about gag and black grouper, it's not as big of a deal to have some misspecification of black grouper be included in the gag landings, because the majority of landings for these two species is gag grouper, and so, when you're having some of these errors pop up, it's a much bigger issue for gag grouper, because they have a lower level of landings, and that really needs to be addressed, in order to get us back from a data-limited situation into an assessed stock situation.

For blueline tilefish, we're thinking about moving this one down into some of the long-term research recommendations, just because it's going to take a bit longer. The next assessment is pretty confined on what it's going to be. The last assessment was done through a data-limited



approach for the fish that are caught north of Cape Hatteras, and then, for south of Cape Hatteras, they used a production model, which doesn't have all the bells and whistles of an age-based assessment model.

The next one is really trying to identify the biological boundaries for white grunt. It has been identified that there are different stocks of white grunt along the South Atlantic coast, and some papers have indicated two stocks, and some papers have indicated three, and so what we're really trying to do is identify these biological boundaries and potentially match up the assessment to deal with those.

Going into the next slug of topics, and, once again, these have been really modified since we sent these out a couple of weeks ago, and I didn't have a chance to look into it prior to then, and I was trying to get the tools available to you guys, more than focused on this research, but we do have some information that's really needed, and so, looking at some of these long-term ones, black sea bass is up here. For this one, we're looking at hermaphroditism. As you guys know, black sea bass change from females to males, as they get larger and older, and it's really trying to focus in on what are the effects of that in some of the stock assessment parameters.

The next species is Spanish mackerel, and that has a gillnet fishery that's associated with it, as well as several other fisheries, and we need to get some good observer coverage for that fishery, not only for looking at discard mortality, but looking at the associated species that are caught with it. We also need to examine how schools, or migratory dynamics, may influence the population, and, now that I'm thinking about this, it might be better, Jimmy, and I will leave this up for you, but, as opposed to me reading through all of these, if we want to go to certain species and then stop and have you guys talk about them, maybe potential research needs that might be needed for a species.

MR. HULL: Well, yes. I think that that might be the best, is to go to each species and then see if someone has some ideas that they can raise their hand on, rather than read every single bullet. That sounds good. I think that's what you asked.

DR. COLLIER: It is, yes. Let me pull up a Word document. That way, I can be ready to add things in as we're talking.

MR. HULL: Well, I know, like on Spanish mackerel, this isn't the mackerel committee, and so we don't really have a bunch of --

DR. COLLIER: So we'll skip that one.

MR. HULL: Yes, and, I mean, I know a lot of the issues there, but I don't know that we should really address that one.

DR. COLLIER: Okay, and so we'll go on down to gag grouper, and how about that, and that's where we'll start.

MR. HULL: Yes, sir.

DR. COLLIER: Okay. So gag grouper -- We have a couple of items here, and it's really looking at connectivity among the South Atlantic and looking at potential genetics and stocks along the

South Atlantic coast, and so, if the fishermen have any questions or suggestions in regards to other pieces of information that might be needed, maybe improved discard mortality rates or anything along those lines, any insight would be greatly appreciated.

MR. HULL: The only thing I would say, and this would apply to almost all the species that we're going to talk about, would be the marine protected areas that we have in place, the special management zones, all the closed areas. I mean, what are they doing? I mean, how are they benefiting us? What are we seeing positively from that? I think that's something that needs to be looked at, and we really haven't gotten a way to define what these closures have done. I mean, incidentally, I think they should be doing good. They should be helping us. You've got that huge Oculina area closure and all these off of north Florida and then going on up the line, and so I think that's something, overall, that would be something that would be helpful, to see what they're doing for us, as far as conservation and recruitment.

DR. COLLIER: Thank you for that, Jimmy, and I do have that noted here, and it's under Section 3 and 4. Since this has been revised, it's actually both of these are combined together now, and it's a little bit more streamlined, but we definitely want to evaluate the spawning special management zones, as well as the deepwater MPAs, to see their benefits, and so thank you for bringing that up.

MR. HULL: Okay. You've got it there. Thanks. Harry, you're up.

MR. MORALES: I had this thought with our previous conversation, whether it's gag or whether it's red snapper or -- How much time do we have to try to save that fish, from the time we bring them up, given the fact that they're going to go back into either a hundred feet of water or 150 feet of water or 200 feet of water, which is really the area that I fish? I would love to be able to tell my fishermen that, guess what, within two minutes, if you don't have the fish already down, he's dead.

DR. COLLIER: Okay, and so I will add that as investigate the --

MR. MORALES: I would agree with the other gentleman. We have some spots where we can catch in the sixty to a hundred, let's say, sixty to eighty feet, and it's a heck of a lot easier. I mean, they're just so less stressed, compared to bringing them up from 150.

DR. COLLIER: Right, and there's definitely some good research on the amount of time, or the depth, and the impact of that, but really looking into investigating the impact of how long a fish is out of water, and I believe there are some papers on it, but I'm just drawing a blank on it, but I will add that in there.

MR. MORALES: Well, depth versus time, and then, from there, for me, it becomes an educational process, right, if we're going to try to improve our numbers, as recreational fishermen.

DR. COLLIER: Right.

MR. MORALES: Thank you.

DR. COLLIER: I am just taking some notes on the side, because this is a PDF, and I don't have it as a Word document, and so I'm just typing them out on the side.

MR. HULL: Right on. Thank you, Chip. Andy Fish, you're up.

MR. FISH: As far as the barotrauma, I would not like to even see anybody put a time on it, just as fast as possible. I mean, I'm sure that everybody wants the picture with the fish, but, if you catch a fish from 150 feet of water, and, the harder it fights, the more lactic acid it builds, and the more barotrauma it builds, and the faster that fish has to get back to depth. I think, to ask for a number, I think it might be a different way to look at it would be just get it in the water as fast as you can, and that's just my input.

DR. COLLIER: Yes, and that's definitely the recommendation from groups like FishSmart that's been developing some of these best practices, to get the fish back in the water as soon as possible, and, if it's not showing any signs of barotrauma, just don't even touch it. Just de-hook it right over the side of the boat.

MR. HULL: That's right, and it's been spoken about multiple times as best practices. Agreed. Chris, you're up.

MR. KIMREY: I was just going to reiterate the barotrauma thing, and you don't need a timeline. All you need to know is you need to get the fish back in the water as soon as possible. There's lots of physiological things that are different from fish to fish, even at the same depth, just like Andy said of how hard he fights, and there's a lot of factors there, but it's been proven, for nearly a hundred years with barotrauma, that the faster you get him back to depth, the better off you are, to prevent that, and that's really all anybody needs to know, to get him back in the water ASAP.

MR. HULL: Chris, thank you. I would also, myself, would like to say that I -- We need, on the fisheries-independent side, sampling, they need to be funded. We need more fisheries-independent sampling, through MARMAP, to where they can expand their timeframe out into a twelve-month season and sample with different gears other than the chevron trap.

By the same token, we could also fund more cooperative, with the fishermen of all sectors, cooperative data collection that can be considered fisheries-independent, but done cooperatively and efficiently and economically and with the skills of a working boat. I mean, those are things that, for me, could make a big difference, if we had -- I mean, most of our stock assessments are considered data poor, and, in many instances, there's just way too many assumptions, and so we need more data collection, more cooperative data collection, more fisheries-dependent and independent data collection, across-the-board, which is going to take more funding, and, of course, the council can't seem to get that, and that comes from Congress, but that's just a really important thing, I think, with all of this stuff that we have. There's a lot here. There it is. Restore MARMAP funding. I see it. I printed it out, so I could look ahead, and then you just brought it up. Thank you. I'm speaking before I'm reading.

DR. COLLIER: Todd can probably elaborate a little bit more on the fishery-independent.

MR. HULL: Todd, go ahead.

DR. KELLISON: Thanks, Captain Jimmy, and hi, everyone. I just wanted to point out -- I won't speak specifically about funding, but, Captain Jimmy, you were just talking about cooperative

research and how that could feed into fishery-independent survey data, and I've spoken with some of you specifically about this, but maybe all are not aware, but, last year, 2020 was the first year of a cooperative -- What we call a deepwater longline survey, and that's from about seventy-five meters to 266 meters, which is roughly -- It's roughly like 275 feet, maybe, to about 1,200 feet, and it's meant to target a suite of species, golden tilefish and blueline tilefish and speckled hind and snowy grouper, warsaw grouper, yellowedge, some of the deeper-water groupers, and so it's a cooperative effort with the industry.

Last year, we worked with two fishermen, Jim Freeman and company out of Florida, and Steve Shelley out of South Carolina, but the survey ranges from North Carolina to the Keys. Last year, we didn't quite make it to the northern and I guess southwestern boundaries there, and so the farthest south was I think in the Upper Keys, and it went north of Hatteras, but not all the way to the Virginia line, but we anticipate, this year, that -- We've got a little additional funding for it, and we anticipate having probably four industry partners on it, and we'll have an increased sample size, and we'll be able to see if we can have a survey that's focused on multispecies that utilize a range of habitats in those depths, and effectively -- Provide effective data for a number of those species.

I will note that the Mid-Atlantic Council, either in 2017 or 2018, funded a survey that was -- That was intended to be like a proof-of-concept survey focused on blueline tilefish and golden tilefish, and, based on the results of that, they decided that, with the resources they had, they probably couldn't do the survey that provided effective data for both of those species, and so they repeated the survey this past year and focused only on golden tilefish.

I think we'll see, in 2021, with some increased effort relative to what we did last year -- We will get, effectively -- It's likely that we'll be able to effectively provide data for a number of species with that survey, or maybe we may need to focus it on a couple, but it is an example of a fishery-independent survey that is based on industry vessels and industry participation, and so certainly there's opportunity to establish more than that, but we do -- I think it is envisioned, at the Southeast Fisheries Science Center, that that will become -- That deepwater longline survey will become an annual survey.

MR. HULL: Thank you for that, Todd. I had heard of it, and I hope you're right, that it is funded continuously, because it really needs to be. It's important that we have some hook-and-line sampling in the deep, and if we could bring it inshore to some other form of even vertical line, like Florida is doing with their repetitive time drop sampling. Obviously, we know that the hook-and-line has a different selectivity, and everything is different about it than the chevron trap sampling, which certainly is vitally important also, and they both are. I really appreciate that, Todd. Thanks for that information.

There's a lot of -- Some of these bullet points are things that I've seen that are proposals for grants, and so there are institutions and agencies and people that are applying for grants to study some of these things, and so some of them are going to be addressed, and that takes time. It takes years, and so, I mean, there is some action here, and it's good, but it just seems like, the more you know, the more you don't know, and, at some point, it's just so complicated that you can never get all the answers to try to replicate reality in a lot of these modeling results, but we need to keep trying. Back to you, Chip.

DR. COLLIER: That explains why you weren't seeing Chris's name up there. I actually had my screen paused, and so you didn't see me scrolling back and forth.

MR. HULL: Sorry. Chris, you're up.

MR. CONKLIN: Thanks. I participated in a red snapper research project that Todd and another fellow -- I guess you all procured funding for it, several years ago, and I was wondering if there is any possibility of you doing something similar like that, Todd. I think the other dude's name was Warren Mitchell, but to do some hook-and-line sampling through fishermen, just the same way that you guys used our commercial boats and send observers or whatnot on the trips for that study.

DR. KELLISON: Captain Jimmy, can I just respond to that?

MR. HULL: Certainly. Yes, sir.

DR. KELLISON: Thanks for that, Chris. Yes, we appreciated working with you on that project, and certainly we've had a number of cooperative projects over the years, and there is typically funding, through a funding source called the Cooperative Research Program, to support those projects, and that's what funded the project, Chris, that we worked together on, and so the key there is just identifying -- I mean, actually, this discussion is a great venue to do it, establishing like priority research needs that we could tackle through that type of cooperative research. For example, if the advisory panel and the council identifies that as a priority, that's helpful in us pursuing funding for the project.

MR. HULL: That sounds good. Anybody else? Chris Conklin again. Fire away.

MR. CONKLIN: You hear all this chatter about the Florida FWC hook-and-line sampling, that it should have probably had more weight or whatever in the red snapper stock assessment, and, I mean, I think this would be a good time for especially -- I learned a lot about that through you, Jimmy, but, if there's a more robust region-wide type of program that NMFS could potentially fund and validate the data and use it and keep it going for a few years, this probably would be a great time to bring it to the attention for any species, but, if you have anything you would like to add, please do.

MR. HULL: Todd may want to add to that, but I can also say that the vertical hook-and-line sampling, through the State of Florida, which I think some funding comes from the federal government, also with that with the state, and it's been very successful, and now it's been funded again and ongoing, and the time series is growing yearly now, but one of the problems is it's only done in Florida, and so you need every state to have the same vertical hook-and-line sampling, which, obviously, has to be done at the federal level to make it happen across the South Atlantic region and not just done by the State of Florida, and so it would have to happen off of North Carolina and South Carolina, and then you can get the full picture, with that type of gear, which would make a big difference, obviously, in my opinion.

Then it's just not one year, but it has to happen continuously. It has to go on for some period of time, and not just snapper. I mean, we're catching. Because there are so many snapper, the predominant catch is snapper, but, obviously, there is catch in other species too, and so it's a grab-all, and it captures all species and provides information on all species, and so hopefully it will

continue on and be funded by NMFS or all the states, and that would be a great one. Bring the longline survey inshore, too. Just start at the beach and start working out, or vice versa, across the whole region. Todd, do you have anything to add to what we've discussed here or Chris's comment?

DR. KELLISON: Sure. Thanks, Captain Jimmy, and thanks again, Chris. I think I would just return to if the AP -- It's helpful if the AP identifies something specific as a priority, or then the council can identify it as a priority, and it's helpful, I think, in terms of identifying what the priorities are, given available funding.

MR. HULL: Right.

DR. KELLISON: If I understand what you're saying, it's that you think it would be helpful if the vertical line survey, like FWRI is doing in Florida waters, would be expanded regionally.

MR. HULL: Yes, sir, I do. I believe Mike is making notes for us on this stuff, and even if it wasn't done -- If it was easier to do it cooperatively with the industry, which I would prefer, but do it -- Or do both, if the funding is available, and do it through the MARMAP boats, too. You can drop lines down easy enough. They used to have the short vertical line and stuff like that, and I don't think they're using, to any amount, any degree, hook-and-line with any type of reel, but, I mean, that's kind of one thing that we need, and, like you said, to prioritize, and I know I'm involved in quite a bit of stock assessments, and I see some of the real needs.

I mean, some things are natural mortality input for these different species into the model. I mean, these things make such a huge difference, and most of them are assumed, and, I mean, there's so many things that make such a big difference that we're so short on having a real confidence in the numbers that we're using, and, of course, they make a huge difference in the outcome of the assessment, and so, as I said, at some point -- For me, I'm at the point where it's like it's just so complex, and how can we ever afford to figure out a way to answer all these complexities that are involved in these complex stock assessments, and I know we're well beyond the point of ever trying to simplify it, but that's all. I see we have Andrew Mahoney.

MR. MAHONEY: I would like to see them start thinking about using underwater drone surveys instead of, or in addition to, the camera surveys that they use now with the traps, and so if there's anything that they could look into on making funding match up with something like that, that could be spread around the Southeast a little better than the hook-and-line surveys that they're doing, and that's all.

MR. HULL: Thank you, Andrew, and I know there is some of that in the works, too. I know a little bit about it, and the Great Red Snapper Count in the Gulf used drones, or they were dragging, towing, and covering areas and surveying and monitoring populations, and I believe that that's getting ready to happen on the Atlantic side too, and so I think we're going to see some of that, but it's something that probably you would agree needs to be done all the time, continuously, if funding would allow it.

DR. COLLIER: Jimmy, you can see some notes that I've been taking here on some of the suggestions that have been made, and so the first one was looking at the impacts of survival of snapper grouper species, or the survivorship of when they're out of the water, and there were some

positives and negatives discussed about that, and so I just made a note of that, but you also had suggested more cooperative research on snapper grouper species, including red snapper in a region-wide program. Essentially, expand the FWRI regionally.

You had suggested to evaluate the spawning special management zones and deepwater marine protected areas and the potential benefits of these areas. There was a suggestion for more fishery-independent data are needed, and improved estimates of natural mortality, and then Andrew had just suggested to conduct underwater drone surveys to monitor populations.

MR. HULL: That sounds good so far. Maybe that's going to be it. Any other suggestions so far, guys? I am not seeing any raised hands at this time.

DR. COLLIER: All right. One thing you will notice here is we have investigate discard mortality due to hooks in shallow waters for black sea bass. One of the reasons that that is important is there's a high number of black sea bass that are released in shallow water, whether it's from a dock or off of maybe some of the shore areas, or in shallow-water artificial reefs, and so it's not likely that barotrauma is an issue for those species, but they are still impacted by hook-related -- A lot of these, in state waters, you're not necessarily required to have circle hooks, and so that could be an issue, and that was suggested.

We do have, under black sea bass, we do have -- We're trying to get at some of that stuff that you had suggested there, Jimmy, with the natural mortality, look at other ways to investigate the natural mortality, and then, within the South Atlantic region, it's looking at potential shifts in abundance of black sea bass within the South Atlantic region.

If you remember back, this species does have a genetic break at Cape Hatteras, where they are genetically different north and south of Cape Hatteras, and there is some indication, at least strong indications, that the population up in the Mid-Atlantic to New England region is changing its distribution, where it's shifting more northerly, and we suspect that this might be occurring for the population south, but it has not been investigated in great detail, but there might be some more recent papers that are coming out on this right now, and so I will have to look into that, but it's definitely of interest. Any other thoughts for species like black sea bass, or are you guys seeing any shifts in population abundance for other species that we should be investigating?

MR. HULL: David Moss.

MR. MOSS: Thank you, Jimmy. Chip just brought up a good point, and it's something I know we've talked about a couple of times, but spatial species shift, due to potential climate change, if we're seeing -- I am curious if we're seeing a lot of species in different areas, i.e., shifting north, because of either we're just able to access them easier, because of all the new electronics and faster boats and all that stuff, or if they're shifting because of climate change and weather indications and things like that.

MR. HULL: Good point.

DR. COLLIER: One of the species that I've heard some fishermen talk about being a little bit more commonly recently, and it's further up north, has been mutton snapper. I don't know if anybody else been seeing that species up off the Carolinas, but that is definitely one species that

has been suggested as moving northward. We're not seeing any hands, and so I'll go on to some of the other species.

We're looking at recruitment events for red grouper, and that species has shown little recovery, and there has been some concern that the population is not doing well, but, prior to this, there was consideration that some of the recruitment of red grouper, and so some of those strong year classes that were observed, and I think it was back in 2007 and 2008 that there was a really strong year class that came through and drove the fishery for many years, and some of the thoughts were that was coming from the Gulf of Mexico, or maybe Mexico or Campeche Banks, somewhere along the line, and so there was some suggestion to try to look at recruitment coming from other areas for red grouper.

Once again, for mutton snapper, we have some discard mortality estimates that were suggested to be investigated, as well as some spawning information as well. Any suggestions for mutton snapper, any potential concerns for that species?

MR. HULL: It looks like everything you have there so far covers it. I don't see any additional -- Here's someone. David Moss.

MR. MOSS: Thank you, and I apologize, Chip, and you may have indicated that species just a minute ago, but my internet is terrible, and so it was kind of fading in and out, but mutton was one of the ones that I was thinking about, from a spatial shift, number one. Number two, and I know that this is anecdotal, but I've heard, from a couple of people down in the Keys, that they're seeing a lot of juvenile red grouper in shallow, as of late, and just for whatever that's worth. I have just heard, from a couple of people, that they've been catching a lot of really small -- I shouldn't say really small, but short red grouper in shallow, over the last year or so.

DR. COLLIER: Thank you for that, David.

MR. HULL: James Paskiewicz, you're up.

MR. PASKIEWICZ: I would definitely like to echo what David said with the small red grouper. We're seeing lots and lots and lots more of those over the last twelve months, six to twelve months, and it's been nice to see.

MR. HULL: Thanks, James.

DR. COLLIER: James, you had indicated that there was potential changes in catch rates due to the number of fishermen, or the frequency of fishermen in an area, for yellowtail?

MR. PASKIEWICZ: Yes, I did, just because of the specific way that we harvest yellowtail, as a top-water fishery, where these fish congregate on the surface with a food source, more and more of an impact with just the sheer number of vessels coming close, whether it's just to try and be on the same rock as you fishing or just watch. We're seeing a lot more interactions with other vessels in very, very close proximity that makes it tough for us.

DR. COLLIER: So investigate the behavior or catch rates of yellowtail snapper in high-traffic areas, and is that kind of getting at that idea?



MR. PASKIEWICZ: Yes. I mean, that would definitely be something to look at, and I would imagine that, just like anything, when changes occur, we're going to have to adjust, especially in a fishery like yellowtail snapper that is not undergoing overfishing or is not deemed as overfished, and so I would imagine that we would get to a -- If this was a main problem, I would imagine that we would get to a place where the species is even more abundant, and then they'll get stupid again. I mean, that's the only conclusion that I can really draw, if this is a main problem, and I don't know how much focus needs to be put on this, but it's certainly something that we could take a look at.

DR. COLLIER: What I'm really trying to do is really think of some out-of-the-box ideas that could be investigated and provide this list to the SSC, as well as to the council, and, that way, they're able to really look at some of these ideas and think about how it could benefit the fishery if we knew some of the answers.

MR. PASKIEWICZ: I understand.

DR. COLLIER: The next group of items that we have are the spawning special management zones and the deepwater MPAs, and Jimmy has already talked about that a bit. Some of the things that we definitely need is good mapping of those areas, as well as some of the information to understand how things are changing over time, and one of the other things that we need is the compliance of these areas, really investigating and understanding are these areas actually being protected, because even just a little bit of harvest for a species that is of low abundance -- That could definitely have an impact.

MR. HULL: Robert Lorenz, you're up.

MR. LORENZ: Chip, just a quick one on the detail. I'm remembering back when these spawning special management zones were discussed, and the MPAs, and we may be coming up on six, seven, eight years since the start of the discussion of the recent group of them came about, and I know it was quite spirited in some circles, and there were some people that didn't want them, and that kind of calmed down, but am I correct, and I thought I remembered that there was a sunset provision put to these, for some of these, that was five years.

You're coming up with monitoring to be completed within the next five years, and I was just wondering if there's a disconnect there, and the council might need to re-up these things, some of them, if there was a sunset provision put on, because I seem to remember there was. In five years, they would either be deemed successful or go away, and some people might call you to task on that, I think.

DR. COLLIER: You are correct that there is a sunset provision, and it was a ten-year sunset provision, and so we have been working -- That's just for the natural bottom spawning SMZs, and so Devils Hole, South Cape Lookout, as well as Warsaw Hole, and it was those three locations. The two artificial reefs that were included as spawning special management zones, those do not have a sunset provision on them.

MR. LORENZ: Okay. Thank you. I didn't realize it went -- I know I was talking five, and they went to ten. Okay. Thank you.

DR. COLLIER: Sure. Thanks for pointing that out.

MR. HULL: James, you're up.

MR. PASKIEWICZ: My comment was going to be kind of along the lines of Robert's comments were. Without like a performance report for these SMZs and MPAs, it's kind of really hard to move forward and really understand -- I know, in state waters in Florida, there's been a big push for the National Marine Sanctuary to maybe close some more areas, and it's been a real hot topic, and I know that the Western Dry Rocks recently had some more regulations implemented in that area, in state waters, and, if we're not getting appropriate feedback, as to the success of these areas, the question, to me, is why are we still creating these off-limits areas at the different times? I mean, I know that the conservation is at the heart of all of this, but we would really like to know if it's working.

MR. HULL: Thanks, James.

DR. COLLIER: Thank you for those comments, and there is a preliminary report, or there is some outreach documentation that's been put together for the spawning SMZs, and there is a group called the System Management Plan Workgroup, and they are tasked with evaluating some of these MPAs and the benefits of them, and so, unfortunately, they have not been able to meet, due to COVID and my increased workload, and I need to get focused back with that group and really get to address some of these topics.

That is a goal of ours, to do that, and so just to let you know that there is some information that's being gathered. There has been information collected at each of the spawning special management zones in regard to some fish spawning in the area, and so we can provide an update to you guys, I guess after the workgroup meets, but that will be some time -- Maybe we can provide it to you next year.

MR. HULL: Thank you, Chip. Once we get a quantitative value on how much these MPAs and HAPC areas and all of these things are providing a positive benefit, as far as recruitment and the stock abundance, and, when they can get that, they can throw it into the computer model, and I believe it will help the outcome of these assessments.

DR. COLLIER: You're probably more going to get a qualitative approach than a quantitative approach on this. We're not going to be data-rich, and it's going to be pretty limited on the information that's available, but we'll look at it and provide you all of the information that we have.

Going into the next group, these are just some specific items, looking at some growth parameters, reproductive maturity for Level 1 and Level 2 species, and those are provided in this table at the end. I will scroll down to that, real quick. We do have species broken out into Level 1 and Level 2 priorities, and this was based on some of the council's feedback on how to treat these fish and whether or not we're going to get to stock assessments.

If it's a Level 1, that's going to be really focused on an age-based assessment. If it's Level 2, it's not as a high priority, and Level 3 means we're not likely to get an age-based stock assessment,

and it's likely going to remain a data-poor, or data-limited, approach. You can see the top priorities here. It's many of the snapper grouper species that we've already been talking about, and these are pretty much all assessed species are going to be the Level 1. The one species that isn't assessed that's in this list is dolphin, but that's not really a concern for this AP.

I am going to scroll back up to the research recommendations. In addition to wanting to know the growth parameters of the Level 1 and Level 2 species, it would be good to have some long-term continuous monitoring of age structures for all species in Level 1 and Level 2. There is also an idea that looking at the size cutoffs of the number of samples sizes to use for some of these stock assessments and how it impacts the outcome of the assessment.

Then, just following on down, looking at some of the cumulative economic and social impacts of the existing regulations on the snapper grouper fishery, and that's going to be pretty important, really understanding these impacts and are they actually benefiting the fishermen and trying to come up with ideas on how to improve management and making it better for not only the fish, but for the fishermen.

We need to update some of the estimates on the recreational economic values for council-managed species, and then we have some of that fishery-independent information that Jimmy was requesting, and then we have some more tagging. I think this really covers everything that you guys have already talked about. If there's any other items that you would like to see, I will be happy to incorporate it, but it sounds like what you guys are suggesting, as far as research topics, really aligns with what is already in that research plan, and so I'm glad to hear that.

MR. HULL: Thank you, Chip. Mike.

DR. SCHMIDTKE: Yes, Jimmy?

MR. HULL: Back to you. It looks like we're done with that, and probably at the end of the day today, and we'll get done here at 4:25, or 4:30, and start back up tomorrow, if that's okay with you, but I will wait to hear that, and, if it is, I would like to just go over one more thing, real quickly, with the AP.

DR. SCHMIDTKE: Yes, that's fine, and we can plan on starting up tomorrow morning at 9:00, and we'll start going through some of the updates.

MR. HULL: Okay. Good. Before you all go, with this form of webinar, it's very difficult, in a lot of ways, to do a lot of things, because we don't have the interaction, and we don't have the sidebar, and we don't have the communication. Like, now, we would all be at a location together, and we can have a good talk, and so we can't do that, under these conditions, and so, as far as -- On the agenda there is Item 11, which is Chair and Vice Chair Election, and I think there's like three different options here that we can go.

One of them, and I could be wrong, and they will correct me if I am, but I think we could go, if you all want to, and you could extend the current Chair and Vice Chair for another year, and perhaps we would be having in-person meetings then, and it would be a whole lot easier to talk amongst ourselves, or yourselves, and come up with some suggestions for that. That, I believe, is one option that's available.

Then the other is, traditionally, since I've been on the AP, the Vice Chair would usually get nominated to move to the Chair position, and then you all would choose a new person to be voted on for Vice Chair, and, generally, we try to make it where -- So I'm from Florida, and I'm a commercial fisherman, and I've been in the Chair seat now, and the next person would move up from Vice Chair and would be a recreational representative and from a different region of the South Atlantic region. That's just some things that I wanted to reiterate to you before tomorrow's discussion, and maybe you guys can talk amongst each other and come up with what you want to do.

If you want to delay this until we're in person, I would be fine with that. If you want to nominate people other than what we've traditionally done, which would be current Vice Chair, Robert, would go forward, and then you would find someone else to sit in the Vice seat, and then they would potentially go forward, after his term, and it's entirely up to you all, and so I just wanted to get that out there and give you some time to think about it. That's it. That's all I've got. We'll talk about it more tomorrow, and so, with that, I'm ready to leave. How about you, Mike?

DR. SCHMIDTKE: Sounds good, and I will just confirm that, yes, that's -- What you talked about, there is an option to continue having Jimmy and Robert Lorenz serve in their capacities for another year. From the council end, the policy is to turn over every three years, but Snapper Grouper typically turns over every two, kind of voluntarily, and so it's within the rules.

MR. HULL: Right on, and so that's an option. It's up to you all, and not me, and so I see some hands up, and so, if it pertains to this item, I don't think we're ready to make decisions on that, but go ahead, James.

MR. PASKIEWICZ: I just did want to identify with your points of not being face-to-face, and I think that we really don't have the opportunity to have some of those sidebar discussions and get a feel for where the advisory panel is headed, in an overall capacity, and so I certainly would support a one-year extension, and maybe we will be able to get face-to-face again in the fall, and maybe really pick up where we left off before COVID, and I think that's good work on your part, researching that, and having it within the established rules is a wonderful thing. Thank you.

MR. HULL: Thanks, James. Rusty, and then that's it. We'll continue on tomorrow at 9:00 a.m. Go ahead, Rusty.

MR. HUDSON: Yes, sir. I had communicated with John Carmichael et al., and Myra, but, anyway, basically, I inquired why I could not reach other AP members through the online list, because they had removed email addresses and telephone number, and so it makes it a little hard to find you all. Thank you.

MR. HULL: Thank you, Rusty. All right, guys. Good job. It was a long day. I wish we could go have a drink together, but we'll see you all tomorrow at 9:00 a.m. Thank you, Mike. Thank you, Myra. Thank you, Chip.

(Whereupon, the meeting recessed on April 22, 2021.)

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APRIL 23, 2021

FRIDAY MORNING SESSION

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The Snapper Grouper Advisory Panel of the South Atlantic Fishery Management Council reconvened via webinar on April 23, 2021 and was called to order by Mr. Jimmy Hull.

MR. HULL: Welcome, everyone, to the final morning of the April 2021 edition of the Snapper Grouper AP meeting. Welcome to the council members, the staff, and all AP members. I sure appreciate you all being here. With that, let's move right on to the next agenda item, which is updates, and starting with the SEDAR updates, and so it's back to you, Mike.

DR. SCHMIDTKE: We will have Kathleen Howington from SEDAR give that update.

MS. HOWINGTON: I am going to do my best to make this short and sweet, and I know that it's a Friday, and you all probably want to start fishing as soon as you can, and the update -- I'm going to start with the recently-completed SEDARs, and I want to mention a few ongoing, or one ongoing, SEDAR, and then actually mention a few things that are up and coming that I would like you guys to keep an eye out for.

First off, we've had three SEDARs be finalized and released, their stock assessment reports, released in the last month, and the first one, SEDAR 66, South Atlantic tilefish, was released on April 6, 2021. The second one, SEDAR 71, South Atlantic gag, was released on April 19, and then SEDAR 73, South Atlantic red snapper, was actually released on March 26, and we got that one out about a week-and-a-half ahead of time, which was great.

All three of these stock assessment reports are going to be coming up in the upcoming April SSC meeting, and so, if you are interested in any of those, I would suggest listening in to the SSC debates. I know that this SSC meeting is going to a little weird, where they're going to have their normal SSC meeting and then an additional meeting on May 3 to be able to tackle gag, and so, if you're interested in gag, May 3 is the date you want to go. If you're interested in tilefish or red snapper, then you can listen in to the normal SSC week.

Those are the three that just came out. Now, before I move on for ongoing and upcoming, I did want to give you all the opportunity, and does anyone on the AP want me to walk through the SEDAR website, to show you all how to find the stock assessment report and all the other documentation?

MR. HULL: Yes.

MS. HOWINGTON: Okay. Sounds good. Give me one moment. Everyone should be seeing the SEDAR website. This is [sedarweb.org](http://sedarweb.org). If you all have never used this, it can be a little bit confusing, unless you know the SEDAR numbers, and so, if you just type in "sedarweb.org", and you happen to know the number that you're looking for, it's real easy, and you just go down here

to these quick links, and you can click on any number you want. For example, 66 is going to lead you to this webpage, SEDAR 66 for South Atlantic tilefish.

It will give you a little summary of a series of webinars, or there's a workshop, and this is also where you can find the working paper documentation, the document list, the schedule, the terms of reference, and the SAR, and so that's right here. If you want the full stock assessment report, that's all you have to do is, just click on that number.

Now, if you, for instance, don't know the number, but you know that there's an assessment going on for a species, what you can do is you can actually come up to the top here, to the "find a project" button, and you can hit the "find a species" button, and, if you do that, then you can just come onto this page. For example, let's just stick with -- Let's go to gag, since that just came out. You can click on "gag", and then that's all of the assessments that gag has had in SEDAR's history, and so you'll be able to look at -- The most recent one was South Atlantic gag grouper, and that's 71, and, again, if you click on that button, it will lead you to the 71 page, with the stock assessment report right at the top.

That's the really short and sweet of how to find the stock assessment reports, but, if you're just interested in say the general SEDAR schedule of what is up and coming, or say you're interested in seeing what other regions are doing, you can click on the project planning grid, and so, on the home page, underneath the buttons, you see this big assessment schedule picture, and that then leads to the project planning grid.

This was up-to-date as of October 2020, and this will be updated after every SEDAR Steering Committee, and so, right now, anything in green has been approved, and it's on the schedule, and it's good to go. Anything that is orange is pending scheduling, and anything that's blue is a future request, and so, if you all are ever interested in what the council has requested of SEDAR, or what you think is coming up, or you, like I said, want to see what other regions are doing, this is a quick way of being able to kind of see what all is going on.

Then the last thing I did want to highlight, because I realize that I haven't presented this to the Snapper Grouper AP, which is why I asked if I could show you the webpage, is the research recommendations. Yesterday, when you all were going over the research plan, I realized that it might be helpful for you guys to find this. Again, if you go to the [sedarweb.org](http://sedarweb.org) home page, and you go to SEDAR projects, and then you click on "research recommendations", and that's going to lead you to this page right here.

Research recommendations, of course, if you just want a PDF, you can click here and get a gigantic PDF with every research recommendation that's ever been released, or you can click on the search tool, and I would recommend the search tool, 100 percent, and this actually was just updated yesterday, and you can click on "South Atlantic Management Council", and then click on whatever species you're interested in, and, again, let's stick with gag, and it will have the list of all the SEDARs that have been involved, and it will actually just lead you to the most recent research recommendations.

If you're ever interested in what has come out of the most recent assessment, what people are suggesting we need to look into, this is a really helpful tool to be able to get you where you need to go and give you some good, quick information. I know that that was really fast, and I apologize.

If anyone needs me to go over anything else, just let me know right now, before I move on to up-and-coming and things to look out for. Okay. I'm not seeing, and I'm not hearing any.

MR. HULL: That was very helpful though, Kathleen. Thank you.

MS. HOWINGTON: I realized that I had never actually presented that to the Snapper Grouper AP, and I was like, well, I should just offer it. Okay. For right now, I do want to -- I want to pause, because one thing I did forget to do is thank all of the appointed Snapper Grouper AP observers, Vincent, Jim, Rusty, Andy, Jack, Randy, Mark, Bob, Jimmy, and Lawton. Thank you all so much for participating in 66, 71, and 73.

We really appreciate all of your input, and thank you to all of the fishermen that were not the official observers that were able to sign-on. It is always really helpful to get your input, and it's always really nice whenever an analyst says, I need help from a fisherman, and is anyone on, and I'm able to look through the list and say, yes, we have people, and so thank you so much for participating. I really appreciate it.

As for the rest of my presentation, for ongoing assessments right now, we only have one ongoing, since we just finished up three, and that is SEDAR 78, and that is our scamp research track assessment, and Jimmy, Deidra, and Randy are our three observers, and so thank you guys for that, and that is scheduled to be completed October of this year, and so hopefully that will be all good, and we'll be able to wrap that up.

After that, then we have a few upcoming SEDARs that I would like you guys to kind of keep an eye on. If any of you all are interested in Spanish mackerel, that's SEDAR 78, and it is starting this May. If any of you all want to just kind of be on the interested parties list, please let me know. The interested parties list, of course, gets all of the updates, and you just don't get the final report, and so you get all the emails, all the doodle polls, and you'll have access to everything. As always, SEDAR is a public process, and so please let me know if you're interested in following Spanish mackerel. Kim, do we have any hands raised?

MS. IVERSON: No hands raised at this time.

MS. HOWINGTON: Okay. Then, after that, we're also going to be having a SEDAR 79, southeast mutton snapper research track. That is going to be starting in August of this year. David and Richie are the two official observers, and so thank you all for volunteering, and I know research tracks are long, and we really appreciate you guys participating.

Then things to keep an eye out for, and I have a few assessments that are coming up that you all are going to be receiving emails about, and so, if you see the kathleen.howington email, please don't delete it. Please read it, because it most likely is going to involve these three SEDARs coming up.

The first one is SEDAR 76, black sea bass. Now, black sea bass was originally scheduled to start this year, but, due to data delays with COVID, it has been postponed a year. Right now, the observers that have volunteered are Lawton, Bob, and Cameron. Now, I recognize that this is a year out, and so you all will be receiving an email sometime this summer with the schedule, double-checking that you guys still want to be the observers, and, if you do not, then the entire

Snapper Grouper AP will receive an email asking for an additional observer, and so keep an eye out for that.

Then SEDAR 82, gray triggerfish research track, the planning team is meeting this summer, and that's going to be starting next May as well. We do not have any observers assigned to that just yet, and so you all will be receiving an email from me, again, this summer, asking if you would be interested, with a draft schedule. If you want to be a part of the research track for gray triggerfish, keep an eye out for that.

Then, finally, the SEDAR 68, South Atlantic scamp operational. To all the Snapper Grouper AP members who are a little confused as to how research tracks work, the research track doesn't give management advice. It is always followed by an operational, to be able to get the most up-to-date data integrated into the assessment, and so, once SEDAR 68 ends in October, the research track, it will be immediately followed by an operational assessment.

Now, this operational assessment could potentially involve observers and panelists, or it could be closer to what used to be an update, where it doesn't involve any panelists or observers at all, and we will not know that until the report has been finalized and released in October, and so this is going to be the email that I really need you guys to pay attention. If you all want to be a part of that operational assessment, and the report is released in October, and it's determined that we need observers, it's going to be a quick turnaround.

Normally, I give you guys about a month to respond to my emails, whether or not you want to participate, and this one is going to be maybe a week, or maybe two, and so it's going to be much faster, because we want to try and hit the ground running, and so keep an eye out for that one. That one is going to be the fastest turnaround, and it's going to be a little bit different than usual, and, ultimately, I just wanted to warn you guys about all three of those. Does anyone have any questions?

MS. IVERSON: Kathleen, I am not seeing any questions. Does anyone have a question? I am not seeing any hands.

MS. HOWINGTON: Okay. Well, that's all I have right now. Like I said, that's all the SEDAR assessments that are planned for next year, and so, if you all ever have any questions, please just let me know. You can find my contact info on any South Atlantic assessment, and I'm right here. This is my email, [kathleen.howington@safmc.net](mailto:kathleen.howington@safmc.net). I'm always here to answer questions, if you need them, or just help you with the website or help you find whatever information you need, and so that's all I had for this morning.

MS. IVERSON: Kathleen, I saw -- Harry Morales, did you have a question? His hand was up, briefly.

MS. MORALES: No, and I will just check in with Kathleen offline, so that I can get a handle on that and how I would participate.

MS. IVERSON: Okay. Thank you.



MS. HOWINGTON: Well, which assessment are you interested in participating in? I will just write your name down, and I will shoot you an email in a sec.

MR. MORALES: The triggerfish I would be interested in.

MS. HOWINGTON: Okay. Harry Morales. All right. I have you written down, and I will make certain that, when I reach out this summer, that you get an email double-checking if you're still interested. Okay.

MR. MORALES: Sounds great, Kathleen. Thank you.

MS. HOWINGTON: Thank you, Harry. I appreciate it. Anyone else?

MS. IVERSON: I am not seeing any other hands.

MS. HOWINGTON: Okay. Like I said, I'm sorry that that was a little bit speedy, but I know that you all want to move on and have your Friday be free, and so, Mike, that's all I had, and Jimmy.

DR. SCHMIDTKE: Thanks, Kathleen.

MR. HULL: Yes. Thank you. It was very good information, and I appreciate it. If there is no other questions or comments from the AP, let's move on to the next item, which is Amendment 48, the wreckfish ITQ modernization.

MS. WIEGAND: Good morning, everyone. It's nice to be able to talk to you guys again, and I don't think I've been able to address this AP since we were talking about best practices, but now let's talk about the wreckfish ITQ program. If you will remember, way back in 2019, the council completed a review of the ITQ program that looked at how the program had changed with respect to a variety of social, economic, and biological factors, and that review offered a series of conclusions and recommended changes to the program, based on what the review found,

While the review did find that the program has been relatively successful, it did think that there could be some improvement, particularly with respect to moving away from the paper-based program to an electronic program, as well as looking into the wreckfish permit requirement, allocation issues, and things like offloading sites and times. That's what Amendment 48 really addresses. It looks at making those improvements and modernizing the ITQ program.

I don't want to spend too much time getting into the weeds on this amendment, but I will just sort of briefly go over what actions, or topics, are being considered in the amendment, and the first one is the council is looking at revising sector allocation and sector ACLs for wreckfish, and this recommendation actually came from the Snapper Grouper Advisory Panel. There was concern that maybe the recreational allocation for wreckfish was too high, and it was originally intended as a bycatch fishery and not a targeted one, and a lower allocation may be more appropriate. It is noted that, especially on social media, we can see that there are recreational fishermen landing wreckfish, but, unfortunately, there is still a pretty low encounter rate with the MRIP survey, and so that's one of the things the council is looking at.

Of course, they're also looking at implementing an electronic reporting system, and, while this is pretty straightforward, it's thought that the user experience could be greatly improved from moving from the paper-based system that the wreckfish shareholders are currently using to an electronic one, and it's going to increase the timeliness of reported data, and it's likely to improve data quality, reduce the costs and time for management, and provide some additional flexibility and ease to fishermen.

As part of moving to that electronic reporting system, the council is also looking at modifying the commercial fishing year for wreckfish, and this is mostly because it would reduce the administrative burden and sort of system downtime that's necessary for the electronic reporting system that's currently in place for other ITQ fisheries, and, with that, they're also considering modifying the spawning season closure for wreckfish, to better align with a different fishing year, but that's something that they have requested explicit feedback from the shareholders on.

They're also looking at modifying the requirement to possess a commercial vessel permit for wreckfish. You have to possess two permits in addition to owning the ITQ shares, because you also have to have the snapper grouper permit, and it's thought that maybe that's duplicative and a little unnecessarily burdensome, both for program participants and data managers, and so they're looking at whether or not they can remove the wreckfish permit while still maintaining some eligibility requirements for the fishery.

They're also looking at requiring all commercially-permitted wreckfish vessels to be equipped with vessel monitoring systems. The shareholders spoke about this briefly at a meeting they had back in October of 2020. There is a desire to get rid of the offloading site and time requirements, and it was thought that, while I wouldn't say the shareholders were excited about the idea of VMS, it was mentioned as a possibility, as a way to get rid of the offloading and time requirements, and so that's something the council is currently looking into.

Additionally, there is an action in the amendment that would look at modifying the offloading site and time requirements to be a bit more flexible, so that it wasn't having a negative impact on the efficiency of wreckfish fishing operations, and then, finally, there's an action that looks at implementing a cost recovery plan for the wreckfish ITQ program, and this is something that is mandated by the Magnuson-Stevens Act, and so the council does have to implement it, legally.

That is sort of the very, very quick overview of the actions that are in this amendment. This amendment is a council priority, but it is going to take a significant amount of time to sort of work through the regulations. They are very closely tied to the current paper-based system, and the council wants to make sure that everything that needs to be changed and updated to move to electronic reporting is addressed, and, also, that everything is going to work for the shareholders.

In September, the council will review draft actions and alternatives and approve them for analysis, and then staff will move forward from there. Additionally, like I said, the council really wants to ensure that any changes are going to work for the wreckfish shareholders, and so they do plan to convene another meeting of the shareholders to discuss this amendment sometime in the summer or fall. I know that was speedy. If anyone is interested in more information on Amendment 48, they're welcome to reach out to me, or reach out to Mike, and he can put you into contact with me, but I will stop here and see if there are any questions about this amendment.

MR. HULL: Thank you. I don't know if we still have a wreckfish shareholder on the AP, but, if there is, do you want to say something, or anyone else, and now is the time. Vincent.

MR. BONURA: I just had one question. I was wondering if they were looking at the possibility of removing the -- I guess, currently, you have to own ITQ in order to get the lease on ITQ, and are they thinking about taking away that whatever you would call it, and I guess how the program works, in order for the other 519 boats to have the opportunity?

MS. WIEGAND: That's something the council is currently discussing. The wreckfish shareholders have expressed concern about widely opening up the ability to get wreckfish shares by removing the permit, and so one of the things the council will be discussing at upcoming meetings is eligibility requirements that are built into an electronic system. I would say, right now, no, they're not looking at completely opening up access to the wreckfish fishery, but what those eligibility requirements will ultimately look like is something that the council is actively discussing.

MR. HULL: I think I saw Rusty's hand up.

MR. HUDSON: Yes, you did. I just wanted to give a little background of the million-pound quota that was supposed to go down to a million that actually got took all the way down to about 200K, and we had to spend \$100,000 or \$200,000 hiring a couple of really good scientists, and we had to do our own stock assessment, and, by the time we did all of that, and it unfolded across a lot of years, we managed to get almost an increase of another couple hundred thousand, but then 5 percent got gave to the recreational, of which I feel that most of those recs that catch the wreckfish with the deep-drop are probably fishing down off of Lauderdale and places like that, which is closer.

A lot of these guys that are up Daytona way have to travel a great distance, up above Georgia, South Carolina, up into the deep, a couple of thousand foot, and we want a stock assessment that can be updated, but, obviously, that's kind of way down on the list, because there seems to be other priorities for the science anymore, and so it's real hard to get a good stock assessment, but we feel that part of that 5 percent for the recs needs to come back to the commercial, because it's being not caught, and then have a way so that you can recognize which recreational person is fishing, so you can actually monitor it through a census of some sort, what they're catching, because -- I believe the modification of those paper permits into a better currency, electronically, gives them the ability to use virtually the last pound commercially.

There are a lot of things that are in this, and I'm sure hoping that the council sits down and does the right thing. I think a half-a-percent, or 1 percent, for the recreational allocation right now is plenty. As far as leasing, Vincent, that's one of the things that's been done, but you have to kind of look at it's a small group of people that have been still involved, because it used to be a longline fishery, when it was a hundred-and-something boats, but it's just bandit reels on steroids that they use, or else the recreational use the deep-drop. Thank you.

MR. HULL: Thank you, Rusty. Robert Lorenz, you're up.

MR. LORENZ: I just want to offer just some information, since he's on the AP, but he is not here, and maybe not everybody knows it, and so maybe contact the gentleman offline, and that is Andy

Piland. Andy fishes out of Hatteras, and so he is able to fish in waters of depths -- He can take a forty-minute ride for things that take three hours down where I am, and so Andy, I believe, does commercial fish, but he does some deepwater bottom fishing, and he and his partner captain, I am pretty sure, fish -- They have fished for wreckfish, and they will take recreational fishermen out for wreckfish, and so he may be somebody, even if you have to give a phone call, to speak to, because he's actually the only one I know in southeastern North Carolina that's doing that and taking charters for people if they want to go.

MS. WIEGAND: Thank you, Robert. That's helpful to know someone that we might be able to get a recreational perspective from.

MR. HULL: Thank you. David Moss, you're up.

MR. MOSS: Thank you, Mr. Chairman. The only thing I will say, and I don't entirely disagree with everything that Rusty said, except for the last piece, and I would caution against switching any of the allocation from recreational just yet, as was just said in the presentation here, and I think we have like zero intercepts, or something like that, from MRIP for wreckfish over the last few years, but, again, you can go to just about any social media page and see that that's not the case.

I understand that it's still technically a rare-event species, and that the intercepts are always going to be low, but, until we really know -- Again, it was insinuated in the presentation that we're possibly moving toward some type of electronic reporting, and I think, until we do that, and really have a grasp on what the recreational aspect of this fishery is, I would caution against moving any of the ACL over.

MR. HULL: Thanks, David. Vincent, you're up.

MR. BONURA: I was just going to add to what I guess Rusty was saying, that there's only a couple of holders now that you could lease from, but we can't currently lease from them unless you own at least one coupon, 100 pounds, and there are a handful of grouper permit holders here in Broward and Palm Beach who catch barrelfish that have interaction on the wreckfish, and it would be nice if we could keep a little bit or lease a little bit of ITQ.

MR. HULL: Thanks, Vincent. Anyone else want to comment or have questions or concerns on the wreckfish ITQ modernization? It doesn't look like there's any more hands up.

MS. WIEGAND: All right. Thank you, guys, for letting me go over Amendment 48 and providing that feedback. Again, if you have any more questions after the meeting, or if you want to talk more, please don't hesitate to reach out to me.

MR. HULL: Well, here's a late arrival. Rusty.

MR. HUDSON: Like I said, if we could get that stock assessment updated, that could be useful for everybody, both sectors, including bringing in some new blood, but we've got to always consider that there is a need to somehow give back to the people that invested here.

They have kept this thing alive, just barely, and it is a very desired fish. In fact, you can see some of these chefs and stuff that do a lot of stuff with wreckfish, and I believe we can clean this up, but

I really believe that the deepwater component for the recreational needs to have some kind of reporting mechanism, and maybe that Reef Fish Survey that Florida is doing is an example, that has come over from the Gulf into the Atlantic, since July of last year, and maybe they can add wreckfish to that and somehow get the recreational component to report what they are doing here, besides just putting it on Facebook. Thank you.

MR. HULL: Rusty, that's a good comment, and this begs to be included in the deepwater recreational stamp, or permit or whatever we can come up with, at the whole regional level that we have requested the council to implement, and so certainly this would fit right into those other deepwater species, and, if we could ever get that going, it would shed a lot of light on that sector and what they're doing. Anyone else? I see no more hands. It looks like, Mike, back to you, and, if you're ready to go to the Citizen Science presentation, it looks like the AP is ready for it.

DR. SCHMIDTKE: All right. We're going to bring in, for Citizen Science, Julia Byrd, to give that presentation.

MS. BYRD: Thanks, Mike. All right. Hopefully you all can now see the presentation and can hear me well, and so good morning, everyone. I just wanted to give you guys a quick update on what's been going on in the council's Citizen Science Program, and, really, I'm going to try to just focus on highlighting some activities that have occurred since you guys met last fall.

First off, I just wanted to give you an update on some kind of programmatic-level activities, and so, in December of last year, 2020, the council adopted kind of updated citizen science SOPPs, or standard kind of operating policies and procedures, with a new, updated kind of vision, mission, goals, and objectives for the program, and so that really is helping lay out kind of where we want the program to go and how we're going to go and how we're going to get there, which will help us figure out, down the line, if kind of the Citizen Science Program is doing what we want it to, and I will say a little bit more about that in a few slides.

Also, I wanted to share with you guys that we had an article published in a journal called *Bioscience* on the development of the council's citizen science program. Rick Bonney, who has kind of been our citizen science expert advisor throughout the development, and is still ongoing now with our program, and he kind of was the lead author on this article, but it was really exciting, because *Bioscience* has a really broad audience. People read it all across the country, and across the world, really, and so we were really excited to be able to share information on how the council developed our citizen science program and share all of the resources that our citizen science kind of action teams developed, and so we're really excited to get that out there, and, if you haven't had an opportunity to read it, I would encourage you to do so, and this presentation has kind of a link to it built in.

We were also really excited, because, this year, one of our pilot projects, the FISHstory project, was selected by NOAA to be include in their kind of citizen science and crowdsourcing report to Congress that they submitted last year, and so we were one of a kind of a handful of projects highlighted, and so we were really excited about that.

I think I let you guys know about this last fall, but, last fall, we worked with some folks at NOAA to do a symposium on citizen science as part of the American Fisheries Society meeting, and it really focused on kind of how citizen science and other kind of non-traditional data sources could

be better incorporated into management and into stock assessments, and so we got some really great presenters, and we learned about some really cool projects, and so we're hoping to kind of turn all of the information we learned through that symposium into a special issue of the *Fisheries Journal*, and so we're working on that now.

Then I also wanted to make sure you guys were aware that NOAA recently, and it was in February of this year, released their citizen science strategy, and so NOAA has kind of six broad science and technology focus areas, and citizen science is actually one of those areas, which is exciting in and of itself, but this citizen science strategy kind of lays out how NOAA wants to incorporate citizen science into their overall mission, and so there's a link in here, if you want to kind of check that out as well.

Then I also just wanted to say that we're kind of continuing our citizen science kind of program outreach, and I wanted to encourage you guys, if you don't follow the council on social media, to do it this month, during April. April is Citizen Science Month, and so we're doing kind of extra citizen science posts and some blog posts about kind of the people who help power our citizen science program, and Allie Iberle, on our staff, has been the one kind of organizing and pulling together that campaign, but we're highlighting a lot of folks, some of whom are on this AP, and kind of their contributions to the program, either through kind of advisory panels or by volunteering through some of our projects, and so I would encourage you to check that out this month.

Next, I want to talk a little bit about kind of what we've done for program planning and how we're going to hopefully kind of evaluate the program in the future, to make sure it's kind of doing what we want it to. As I mentioned on the last slide, we've kind of been working with one of our citizen science advisory groups, the Operations Committee, to kind of develop a new kind of vision and goals for the program, which is going to help us figure out kind of if the program is working like we want it to, and so we have kind of four main goals.

The first one is focused on kind of maintaining and developing our program itself, and the second is focused on kind of the development of individual projects. The third is all about the data, making sure the data are robust and fit for purpose and are accessible, and then the fourth goal is focused more on engagement and learning and collaboration, and so, as we look forward, to make sure the program is doing what we want it to, the first three goals are things that are kind of easier to measure, and especially, once we have some project results in, we'll be able to figure out if we're meeting those goals.

The fourth goal is a little bit different, because we're trying to measure things like trust and learning, and so, in order to kind of figure out if we're meeting the fourth goal, we really need to collect some baseline information, so, as we move forward, we'll have something to compare it to.

To do this, we are going to be working with Rick Bonney to gather some of this baseline information on kind of trust levels and knowledge and engagement and attitudes, and so we're hoping to do this by talking to a wide range of kind of fishermen and scientists and managers throughout the South Atlantic, and so we kind of have a three-pronged approach that we're using for this evaluation plan.

The first is we want to do kind of interviews with folks, and then, from what we learn from those interviews, we want to develop kind of an online survey that we can then just implement and analyze in 2022, and so, right now, we're pretty early in this kind of project. Rick is trying to develop an interview script, and we're trying to identify folks who may be good to interview, and so we're hoping to talk with people who are familiar with the council's citizen science program, as well as folks who may not be familiar with the council's citizen science program at all, and so, if you guys have any suggestions on folks who may be good to interview, or if you think you would be a good person for us to interview, please let me know, and you can kind of let me know later, during the meeting today, or just reach out to me, because we're hoping to kind of get interviews started later this summer.

Next, I want to switch gears a little bit and talk about some projects and collaborations that are under development, and I know I updated you guys on a number of these things last fall, and so I'm just going to zero-in on a few things where kind of activities have occurred since you all met last November, and the first one is kind of the dolphin wahoo participatory workshops.

As a quick reminder, this is a project that we're collaborating with the Southeast Fisheries Science Center on, and Mandy Karnauskas and Matt McPherson, with the Science Center's Miami Lab, are kind of leading the efforts here, and the idea is to kind of hold a series of workshops in kind of the North Carolina/Virginia area and then the south Florida area, to put together a conceptual model of the dolphin wahoo fishery, and that just means kind of learning more from fishermen and kind of folks within the fisheries community about kind of what they value in the fishery, what's important to them in the fishery, what are the risks to the fishery, that sort of thing.

We're interested in getting information from those two different regions, because what we've been hearing from fishermen is that the kind of perception of the fishery is very different in those two areas, and so we held in-person workshops in Virginia and North Carolina, back in March of 2020, before kind of everything shut down due to the pandemic, and so we were originally scheduled to hold workshops in south Florida in 2020, but that got postponed, and, since it seems like holding in-person workshops is still something that's not going to be able to be done in the near future, Mandy and Matt kind of switched gears, and, in order to collect information from south Florida fishermen, they ended up doing interviews, individual interviews, with fishermen and then held a webinar with kind of the fishermen they interviewed, to make sure they captured their information correctly.

That has been going on over the past month, and I wanted to make sure you guys were aware that, if you're interested in this project, Mandy and Matt are going to be presenting results of this project as part of the council's new seminar series on May 11, and they will be presenting at 1:00 p.m. If you're interested in learning more about that, just feel free to reach out to me or Mike, and we can share information with you.

The next project that I wanted to give a quick update on is eMOLT, and so this is a project that is run out of the Northeast Fisheries Science Center by Jim Manning, and they are partnering with commercial fishermen to collect environmental and oceanographic data, and it's a really kind of very successful citizen science project that's been going on for decades, and many of the folks who were kind of the initial fishermen working on the project are still helping collect data as part of this project.

They basically attach kind of a probe to commercial gear, and they collect things like bottom temperature and other environmental information, and so they were interested in bringing this program down into the South Atlantic, and so I think I gave you guys a heads-up on that last fall, and so they submitted a grant to try to get money to kind of fund that expansion, and we wrote a letter of support, and, unfortunately, we found out, earlier this year, that they didn't receive funding, but we're interested in kind of continuing discussions with them, because I think it would be really awesome to kind of help them try to expand this project down our way.

Then the last project that I wanted to give a quick update on was one that we're working to partner with the Dolphinfish Research Program and Dr. Wes Merton. They do a lot of kind of wonderful dolphin tagging work, and we're hoping to work with them to kind of expand some of their tagging efforts. The council manages dolphin in the Mid-Atlantic and New England areas, but there's really limited information on movement in those areas, and so we have put in a proposal with him to try to expand some of their tagging efforts kind of in the Mid-Atlantic and New England regions, to collect some of that information. That's a quick update on projects under development.

Then I wanted to give you guys a quick update on the two kind of pilot projects that we have underway now. The first one is the FISHstory project, and, again, this is a pilot project where we're trying to kind of document historic catch and length using old fishing photos, historic fishing photos, and we're really hoping to kind of fill a gap and to let us learn more about kind of the fish that were caught prior to when kind of for-hire dedicated catch monitoring programs came into place in the 1970s and 1980s.

Again, it's kind of a three-component project, and I know this is a little bit of a review for you guys, but kind of the first component was digitizing these historic photos, and, as you all know, we kind of partnered and worked really closely with Rusty on this project. He provided all of the photos for this pilot project from his family's fishing fleet in Daytona Beach from the 1940s to 1970s, and so he scanned everything in and provided a lot of kind of background information for us, and we have all of that kind of archived here at the council.

The second component is this for-hire catch component, where we're hoping to learn more about kind of the catch composition, and so that's underway now. We're collecting information for the for-hire catch component through the online crowdsourcing platform called Zooniverse, and so Allie Iberle kind of gave a demo for you guys of the FISHstory project at one of your past meetings, and so we're continuing to collect information from kind of volunteers through Zooniverse. They are helping us count and identify the fish in these photos. Then the third component of the project is we're developing that method to estimate length of fish in photos and pilot testing it on king mackerel.

Just a quick update on how things are going in the for-hire catch composition component of the project, and, again, we really are continually blown away, since launching in May of last year, and we've had lots of volunteers who have been working on the project. I think I looked last night, and we're had over kind of 2,080 volunteers that have made over 34,500 classifications, and so folks are still helping us kind of collect data, and we haven't kind of lost any steam since we launched the project.

A new part of the project that we really kind of picked up this year was getting validation team members to help us verify information in some of these tricky photos. As a reminder, we have



multiple kind of volunteers, or citizen scientists, looking at each photo and helping identify and count the species within the photos, and, when there is volunteer disagreement, then we use a validation team, and the validation team is made up of fishermen and scientists, and there are actually a number of folks who are on you all's AP who are part of our validation team who help kind of verify information in some of the more challenging photos.

They really got started in January of this year, helping kind of verify information in photos, and they have been working over the past few months, and so we're really thankful for the members of our validation team helping us make sure we're collecting kind of quality information. We're also kind of continuing with some preliminary analysis in the next couple of months on this project, as we're really going to dig into the data and start looking at results and kind of analyzing the information that's been collected through Zooniverse.

For the length analysis part of the project, again, we're kind of estimating fish length by using the lumber and the leaderboard where the fish are hanging as a scale, and so we kind of developed the methodology, and it was reviewed by the council's SSC in October, and they were really kind of supportive of the project and thought that the length information produced on king mackerel could be useful for the next assessment, and they also provided some good feedback on ways we may be able to improve the methodology.

We have been having folks working with us to -- They have been very busy measuring king mackerel, and now we've completed over, I think, 900 photos, and so we are working to finish kind of the king mackerel measurements in all the photos now, and then we'll begin kind of analysis of that whole dataset as well in the upcoming months.

The last couple of things that I wanted to say about FISHstory is we've had -- We continue to have a couple of great kind of features promoting the project, and we were one of forty projects that were featured in Zooniverse's 2020 highlights book. They have hundreds of projects, and so we were really excited that FISHstory was one of the ones they chose to highlight in their book, and then Cameron Rhodes did a great article in Seven Seas Media that came out in December on the project, if you want to check that out, and then Allie Iberle and I, last month, did a kind of livestream web show with NC State and a group called SciStarter. They have Make It Count Monday, where they highlight a citizen science project every week for their audience, which is primarily a lot of educators, and we did that last month and were able to get some new volunteers from kind of educators in North Carolina.

As far as next steps go for FISHstory, our current grant funding is going to end mid this year, and so we've been looking for future funding opportunities, and, actually, we worked with Rusty, and we submitted another grant, earlier this year, to hopefully continue and expand this project, and we'll be finding out next week if we get it, and so we're keeping our fingers and toes crossed until we kind of hear back from the funding agency.

Then the last project that I wanted to update you guys on was our SAFMC kind of Scamp Release project, and, as you all know, this is a project where we're hoping to work with commercial, recreational, and for-hire fishermen to collect information on released scamp grouper, and so the project launched in June of 2019, and so we've been continuing to work to recruit and retain fishermen to help us collect this kind of really critical information on released fish.

We've also been working with a graduate student whose overall research is working to identify kind of the best strategies to help market some of these self-reporting apps to fishermen, and, as part of his research, he did interviews with some of our SAFMC Release participants, and then he is also analyzing some of the MyFishCount survey results and marketing strategies that BeBe and Kelsey Dick kind of employed over the past few years, and so he'll be wrapping up his research later this summer.

Then a big part of what we've been doing as part of the kind of SAFMC Release project, over the past several months, is through a grant that we got from ACCSP, and it's a grant that has kind of two components. The first component is what we're doing is hoping to combine kind of the SAFMC Release app with an app from the North Carolina Division of Marine Fisheries called Catch U Later. The Catch U Later app is modeled after our SAFMC Release app, except for it's collecting information on released flounder. We're hoping to combine these two projects under a new kind of ACCSP citizen science app that could be used kind of all along the Atlantic coast, and so that's one component of the project.

The second component of the project is to develop kind of a customizable portion of this new citizen science app so that someone would be able to go in and kind of build a project on-the-fly to collect data kind of within the app, and I will talk a little bit more about that in the next couple of minutes.

By kind of the first component of the project, and combining the Release app with the Catch U Later app, one thing that's going to allow us to do is expand the number of kind of species we're collecting information on as part of SAFMC Release. Right now, we're just collecting information on released scamp, and, once we kind of combine with -- In this new citizen science app, we'll be able to collect information on all the shallow-water grouper, and we're hoping to have that kind of new launch date in the spring of this year.

To share a little bit more information with you guys about the new ACCSP citizen science app, the app is going to be called kind of SciFish, and Allie Iberle, who is with our staff, really took the lead on naming and kind of branding this new app. We've been working with kind of an organizing committee of folks from Harbor Lights Software, ACCSP, North Carolina DMF, and our staff to kind of develop SciFish. When SciFish launches, later this spring, it will house two projects, and so SAFMC Release will be under it, as well as North Carolina Division of Marine Fisheries' Catch U Later app.

Moving into the future, SciFish would be able to house more projects from kind of ACCSP partners from along the Atlantic coast, and, as we work to develop kind of the customizable portion of this app into the future, partners would be able to kind of build a project in the SciFish app on the fly, based on a pool of data fields that they would be able to choose from.

Then a little bit more on the customizable piece of this project, the customizable app piece of this project, and we have been holding a series of meetings this spring, that I mentioned to you all last fall, and that is to kind of help inform the continued development of SciFish, and so we're wanting to get information from a broad group of folks on kind of what data needs are there, and so what data fields do we need to include in this customizable portion of the app so that folks will be able to use it to develop projects, and so we've been working with a great team of folks to help us kind of organize and coordinate these meetings, and we started gathering data in February of this year.

We sent out an online questionnaire to get general information on what people would want to see out of a citizen science app, and we got close to kind of 200 responses, and I know there were a number of AP members who responded to this, and so thank you for sharing your kind of perspectives. It was really helpful.

After we did the questionnaire, in March, we held a series of two townhall meetings, where we kind of dug more into kind of the information we gathered through the questionnaire to learn more about people's kind of needs, and then, over the past month, we've held a meeting with kind of a core group of around thirty-five to forty people who are kind of a mix of fishermen, scientists, and managers from all along the Atlantic coast, and they're kind of taking all the information we learned through the questionnaire and the townhall to kind of build a roadmap for the continued development of the SciFish app, and David Moss, who is on you all's AP, has been one of our kind of core team members and has brought a lot of really wonderful kind of perspective and insights to that conversation.

That's a quick update on kind of what's been happening in the citizen science program, and then the last thing I wanted to quickly do is give you all a quick demo of the SciFish app, and so I know many of you guys are familiar with the SAFMC Release app, but we've made kind of a few changes that I wanted to show you all, and then I also wanted to show you guys how kind of easy it will be to switch between projects within SciFish, for people who want to participate in kind of more than one citizen science project at once.

We have heard, from a number of people, that there are a ton of apps out here, and so this is one thing we're trying to do, to have kind of one app that could house multiple different types of citizen science projects, and so give me just a minute. It will take me a second to kind of pull up the app on my computer, and so bear with me for just a second.

Hopefully now you all should be able to see the SciFish app on the screen, and so this is still an evaluation version. We're hoping to kind of get everything finalized and launched in the next month or so.

When you come to SciFish, you will log in, and then it will immediately take you to the last project that you were in, and so, when I was in this app last, I was in the SAFMC Release project, and so that is what it will automatically take me into. I know that many of you are familiar with Release, but I know we have kind of a number of relatively new AP members, and so I wanted to just quickly walk through kind of how you enter information on released fish and then share with you guys a couple of changes that we've made based on feedback that we've gotten through the app thus far.

If you catch a grouper that you're going to release, there are kind of three ways where you can start a record. The first is by taking a photo with your phone, which is the top green button on the left with the camera, and you can press that to access your camera. You can also start a record by choosing a photo from your camera roll, which is the second button, or you can start a record by just entering information without taking a photo, which is the third button that kind of looks like a keyboard.

If you catch a grouper, but you're not going to release it, and you're going to keep it, we also would love to know about that, and you can let us know about that through submitting a no-release report, and so that's this fourth button, which is on the right, that has like the Ghostbusters circle with a slash through it.

For this demonstration, I'm just going to start a record by using my camera, and so I will select that, and you can take a photo, and then you can use the photo, and then you can see that it started a record and that the photo is at the top of the screen. We have added a new species button, because, again, we were originally collecting information just on scamp grouper, but now we're collecting information -- When we launch this, we'll be collecting information on all of the shallow-water grouper, and so you can enter your species, your trip type, trip date, the release time, and then you enter the length of the fish that you are going to release, and so you can do that one of two ways.

One is by just entering it in, and then we're testing a kind of new feature, where you can use your camera to help measure the fish, and so, if you press the little measurement button, you can see that, when I am holding my phone over the fish, a grid pops up, and you can put a dot at the beginning and the end of the fish, and it will estimate a length for you. This is a new kind of feature that we're testing out, and we really want to kind of work with folks and get some fishermen to help us test this out, to see if it work on the water well or not.

Next, you can enter your depth caught, and then your location, and you can either enter your lat and long manually, or you can drop a pin on a map, and I have my GPS kind of enabled within the app, so it automatically knows where I am. You certainly do not have to do that, but you can drop a pin. Next, you will enter hook location information, hook type information, condition on release, and then we have some information on releasee treatments at the bottom. Did you cut the line and leave the hook in the fish? Did you use a descending device? Did you vent the fish? Then we added a new field for shark predation.

We've been hearing so much about folks encountering a lot of shark predation and wanting to be able to report that in some way, and so we added that new check-box in, and so you will simply kind of check the ones that are relevant to you, click "save", and then you're able to use the app when you're offshore and not in cellphone range. It will save everything, and it just won't upload it to our database, and so, when you get back to shore, or are in cellphone range, you just click "upload entries", and it will upload and tell you if it's successful. Then, on the main screen, you will see a little cloud with an arrow at the top that shows you that it's been successfully uploaded.

That's a quick overview of SAFMC Release, but then, if you want to switch projects within SciFish, you simply go to the hamburger menu, in the upper-left corner, and click "switch projects", and so I can switch into the Catch U Later project, and you can see that I'm automatically taken into their project, and so the colors are a little different, and it looks a little different, but it collects generally the same information, and so I won't walk through that again.

The great thing about kind of this app and being able to house multiple projects is the information from both projects will get sent to the ACCSP database, and it will be filtered, so that the Release information will be available to folks within Release, or who are interested in looking at kind of released scamp grouper information. The information on flounder will go into kind of a separate portion of the database, and so that's just a quick walk-through of the SciFish app and how it will

work, and I will kind of switch screens and go back to my main monitor now and see if you guys have any questions about kind of SciFish or any of the information that we've gone over today.

I know, yesterday, I heard some folks talking about how they have seen short red grouper in their area, and so, once we launch SciFish, I will probably be reaching out to you, because we would love to kind of capture some of that information within our app.

MR. HULL: Wow, Julia. What a presentation, and, I mean, all I can say is impressive. It's like a dream come true for me to see this, the way this has developed in such a short time, and all the work that you and Allie and all the council and all the staff have done, and it is truly impressive, how this has developed. Thank you very much.

MS. BYRD: Thanks so much, Jimmy.

MR. HULL: Harry, you're up.

MR. MORALES: Great job. Really, really great job, and, I mean, I think I see a lot of additional benefits that can come from the development of this, especially on the recreational side, where we're not as accustomed to any kind of reporting, and I think the time has come that that has to be. I've tried to talk to fishermen that I know about using this app, and we had talked to you previously, and I guess my question is, when the fisherman is filling out all that information, is it optional as to what they give?

MS. BYRD: Harry, I think that's a great question, and so some of the information is optional and some isn't, and I know -- So I should have noted that when I was going through the app, and so things like we need to know the species, the date, the time, the kind of trip, and so is it a commercial trip or a recreational trip, and the length information we really want to get. It's one of our required fields, but we understand that sometimes you can't get the length of released fish, because you're trying to get it back in the water as quickly as you can, and so there's a -- If you're not able to get a length, there's a check-box that you can say that. Then depth is also another field that's required.

The rest of are optional. Originally, we had kind of location as a required field, but we know that can be really sensitive, and so that will be kind of changing once kind of the Release project comes out and the SciFish app. As far as kind of sharing information, I know that location information is very sensitive, and so we won't be showing publicly any kind of location information, unless it's grouped into kind of broad grid areas, so that we don't share anyone's specific kind of honey holes or things like that. Harry, does that answer your question?

MR. MORALES: Well, yes, it does, and, really, the bottom line was that there is no fisherman that I know, serious fisherman, that willingly gives up their numbers. The gentlemen that I know are so damn protective of them, but depth was something that they were more than willing to share, and I think, ultimately, that can also be a benefit to us.

I was a bit concerned about the amount of time that we're with a fish that we're going to be releasing, but I think your points are well taken. If we can either estimate -- Especially if we can, while the fish is in the water, snap a picture, and the program can calculate the length of that fish, and get him down, that would be great, but, ultimately, I am a proponent, in the red snapper region, of having some kind of tag system, and I'm looking at your application and the fact that it can feed

information, almost on a real-time basis, as maybe a vehicle by which fishermen can, in essence, declare that they are fishing for red snapper and have it report in. Anyway, I'm impressed with what you're doing. Thank you very much.

MS. BYRD: Thanks so much, Harry, and I know there have been other folks who have -- Kind of other folks, participants, in SAFMC Release who have asked about red snapper, because, I mean, you guys talked about it for a long time yesterday, that the discards are a big issue in that fishery, and so they have asked if we're going to kind of expand to collect information on red snapper, and so I know that's something that we've kind of --

We are talking about, and we're kind of trying to take bite-sized chunks, as we're developing the app, and so we wanted to start with scamp, one species, initially, and we've kind of expanded it to shallow-water grouper, but we've been hearing from other folks red snapper, and red porgy has also come up, with kind of the regulations that are likely going to have to come in place, and there are going to be increased discards, and so I think kind of expanding to more species in the future is something that we're looking for, and we're just trying to take kind of one step at a time, so that we're able to kind of collect the data and QA/QC the data and kind of grow slowly, to ensure that things are kind of working well and that we're able to manage the data effectively.

MR. MORALES: Great job. Great job.

MR. HULL: Thank you, Harry, for those comments. The future is bright and wide for this citizen science, both in management and science. I mean, it's endless, the things that are being developed now, and hopefully the funding for it, in particular the FISHstory, happens, and, in my opinion, it should be a line item funded from the agency and not dependent on grants, but it's that important. This is really, really exciting stuff here, guys. Does anyone else have some questions or comments? I am not seeing -- Here we go. It looks like Rusty. You're up, Rusty.

MR. HUDSON: I was glad that Julia mentioned the work that Chip and them have been doing with the measuring the king mackerels, and, of course, we can get it off the leaderboard there, the various age classes based on length, and we can do the same thing with our red snapper that are probably ten years and younger, and actually isolate a lot of ages down to the size it was caught during the 1940s through the mid-1970s. Thank you.

MS. BYRD: Rusty, I guess that's a great thing to mention, and so, as part of the new grant that we'll be finding out whether or not we get funding next week, we're going to try to kind of apply the method that we did to measure king mackerel to red snapper and to dolphin, and then we're actually going to try to see -- Right now, we're doing the measurements outside of the Zooniverse platform, but we're going to actually try to see if we can get it done within Zooniverse, so that kind of we can use crowdsourcing to help us kind of measure some of those fish, and so, again, we're keeping our fingers crossed and hoping that we get good news next week.

MR. HUDSON: Yes, and I remember you telling me that, with this new application, and also about the benefit of another Ponce Inlet fisherman that provided several hundred more older pictures on the racks, and I kind of look forward to some of the other fishermen up and down, from North Carolina to the Florida Keys, that can find some of these archives. Thank you.

MR. HULL: Thank you, Rusty. Chip.

DR. COLLIER: Thanks, Jimmy, and I just wanted to follow-up with Harry, where he had indicated that they don't want to give away the exact location of a fishing spot, and I was wondering if he feels that people would be willing to give a latitude and depth, in order to provide some type of location information, as opposed to just depth. So we wouldn't be asking for the latitude and longitude, but it would just be the latitude and the depth that they were fishing, and that could potentially be useful in developing some of these management issues.

MR. HULL: What do you think, Harry?

MR. MORALES: Well, there's only one to find out. You know, I'm nosy enough, and I can talk enough, and it's very simple. I will ask the question. Of course, the skeptic is going to say, well, the latitude and the depth pretty much gets you to the longitude, but who knows? It's just such a touchy subject, and it's incredible. It's incredible, including when a boat comes up next to another boat and sort of is just taking the number that way. I mean, I don't know, and it's a bit crazy for the amount of ocean that's out there, but it is what it is.

MR. HULL: Thanks, Harry and Chip. Rusty.

MR. HUDSON: It is a public resource that we're trying to model with the stock assessments and stuff, and I have actually made a lot of areas available between North Carolina and Florida, but that was just my own personal choice. Of course, that's not published for people to just sort of grab, but it's actually for science use.

One of the things that you all could possible do is some kind of block, and I don't know which blocks are better, and I know there's ways that the headboats and some of the other situations, with SEAMAP and et cetera, that kind of have an area, but it doesn't isolate down somebody's hot numbers, and I understand exactly what Harry meant about people coming up on you and stuff. Radars make it nice to sneak up on people, et cetera, and it doesn't take much to get caught anymore.

MR. HULL: Thank you, Rusty. James.

MR. PASKIEWICZ: Thanks, Jimmy. I was wondering if the app could have a built-in differential when it's using the cellphone's GPS, like how our GPS is not exactly accurate, because of security reasons, and it has a differential built into it, and I wonder if the app could do that as well, and have like some sort of a sequential variance on a day-to-day basis.

MS. BYRD: James and Rusty and Harry, thanks so much for those comments, and I think this kind of issue with location and wanting to either use a grid or -- We call it a buffer, kind of a buffer around a location that would automatically come up in the app, and that's something that we kind of heard a lot and discussed through these kind of customizable app scoping meetings we had, and all of the fishermen who participated talked about the sensitive -- It's really kind of the confidential and sensitive nature of fishing locations, and so those are things that we are looking into, and we'll be kind of working with the app developer, Harbor Light, to figure out ways that we can maybe do that in the future version of SciFish, and not the one that's coming out right now, but maybe the next version, to try to see if we can build some buffers in around that kind of stuff, so folks

may be more comfortable sharing kind of general location information and not be worried about giving away their numbers.

MR. HULL: Thank you, James. Thank you, Julia. Do we see some more hands, some more questions and comments? I don't see any more raised hands, Julia. Now I do. Robert Lorenz.

MR. LORENZ: I'm just trying to get Chip a little more information, because I know how important at least the latitude and depth is going to be, but I was just wondering, and could the app, at least in the reporting, eventually boil it down to one decimal point? Like, say where I am, if I gave you 33.9 latitude, and then, if the depth was in some kind of increments, like under thirty, thirty to sixty, sixty to ninety, something like that, or even rounded just to the nearest ten, eighty to ninety, maybe folks would feel a little more comfortable, if it's explained in the outreach.

If I were to give you 33.9, sixty to seventy feet, that's a heck of a lot of ocean, and that's no honey hole, for sure, and so that's just something to think about. If you can kind of round down, it might help. The more you round down, the better the fishermen -- But it still has to be useful for you and for us. Thank you.

MR. HULL: Harry.

MR. MORALES: Well, it makes me think of a kid in a candy shop. When you have something new like this, it's like, gee, it would be great to have this, this, this, that, and the other, but, at the end of the day, initially, the most significant thing is the acceptance of the app, period, and getting the mass population to embrace something like this.

I agree with Robert that, if -- As opposed to -- For example, where I fish, specifically, there's an area that is sixty to eighty, and there's an area that's 110 to 120, that I know, and I've got multiple marks, and there is the 135 to 145 area, and then there's the 195 to 210, and these are all different spots that I have, but, at the end of the day, if you're looking at rolling something out and getting 20,000 fishermen willing to use that app on the east coast, it's going to provide a wealth of data, and, if what you have is -- I believe there is a difference, and, look, I'm only doing this for fifteen years, and there are people on this call that dwarf my experience, but I have that sixty to eighty-foot area, and I've got that 100 to 120-foot area, and they're radically different, and how I treat the fish is also different.

As a matter of fact, the fish that are in those spots are different, and all of that data, especially from the recreational side, where everyone is talking about we don't know what the hell they're doing - I was thinking about yesterday's conversation, and the recreational fishermen, which I am one, you almost feel like a red-headed stepchild, because nobody knows what I'm doing, and so getting to the point of being able to get you data for recreational fishing, and I was looking at the NOAA report that came out last year, and recreational fishermen spend \$10 billion.

I mean, it's important, but we're blind, and so getting some eyesight, regardless of whether or not it's 20/20, but getting some eyesight is the initial step that has to occur. Then, from there, refine that sight, if need be, but the data that we get, if get a bulk of data, that's going to be doing something that we simply don't have today, and so that's my point.



MR. HULL: Those are some great points, Harry. I agree with them, and I know everybody on this AP -- We've been telling them for a long time, and so hopefully it's starting, and hopefully it will move right along, and it will be accepted, and it will get refined, and it has a great future. I see Bobby Freeman. Go ahead.

MR. FREEMAN: I feel like I may be put in the category of retarded, but, some years back, and my memory is not providing me with the name of the previous council chair that was with the North Carolina Marine Fisheries, and there was some controversy about the fish aren't out there and all that kind of stuff, and I gave her a list of 135 hot spots that I have fished over the years, and I don't know whether that was ever shared to the research boats, but that was the intent, that, rather than blind fishing arbitrary spots out there, where, as some of the guys said, hey, you don't need to be checking there, because they don't live there, but these numbers that have been productive for me over the years, and that list is still available, but I would have thought that it had already been forwarded to the research boats out of Charleston.

If it's not, then that would be something I can still do, but, since I sold my boat and business five years ago, the numbers aren't as valuable, but, at the time I gave them, I was innocently intending that somebody look at these spots and prove that, hey, there is fish out there, and we were proving it every day by bringing stuff to the dock.

MR. HULL: Thank you, Robert. Thanks for doing that and all you've done. I think that Todd is up, and maybe he can answer your question. Go ahead, Todd.

DR. KELLISON: Thanks, Captain Jimmy, and hey, Captain Bobby. I hope you're doing well. We live close to each other, but we haven't bumped into each other in a little while. I think you were talking about Michelle Duval that maybe you shared that information with, but I know that you also shared a lot of information with our lab, Nate Batcheler and myself, and we coordinate closely with South Carolina DNR, on the fishery-independent survey side, and so they have access to that information as well. I wanted to convey that, if you heard my comment yesterday about the deepwater longline survey, that we're working with industry to implement, that the points that you conveyed are helping to guide sampling in that survey, and so thank you for that.

MR. HULL: Thank you, Todd. Just as you did, Bobby, I, and others in Florida, we gave -- When all the sampling needs were being improved and they expanded the independent sampling of the chevron trap to the south, we gave them all our numbers too, and you could see the difference in the catch right away, once they started fishing where they needed to be fishing, and so it pays off. Any others? Any other hands on citizen science right now? Todd, go ahead.

DR. KELLISON: Thanks, Captain Jimmy. I should have stated also that the information that you shared with us, and we work also very closely with the State of Florida, and there are many others who are listening, and also who are not part of this group, that have provided information, and we do put that information to good use, and so thanks to you all.

MR. HULL: Okay. Do we have any more? I think we've covered it pretty good, and we're all pretty impressed and very happy to see this program. It's a great success so far. Back to you, Julia.

MS. BYRD: I would just say thank you, guys, so much for your support and good feedback, and, as we kind of expand Release to all the shallow-water grouper, I may be reaching out to some of you guys, to see if you may be willing to join the project, and so, again, thank you so much for letting me present this morning and for all the support you all have given to the program.

MR. HULL: Right on. Thank you, again, and so back to you, Mike.

DR. SCHMIDTKE: Thanks, Jimmy. I will pull the agenda back up, real quick. I think we are to our last update on climate change, and I will pass the mic over to Roger to give us that update.

MR. PUGLIESE: Thank you, Mike, and good morning. I'm Roger Pugliese, Habitat and Ecosystem Scientist with the South Atlantic Council, and welcome to those who I have known for many years, and good morning to those who I'm basically probably presenting for the first time, and I will be brief, which, for those who know me, that's going to be a challenge.

However, I will get into an issue that is a little longer-term and farther-reaching, and I think is a concern to most fishermen, and it's been raised a lot more times, and hopefully some of the science is catching up and some of the activities are advancing to advance our working in the South Atlantic region on climate change, so it helps provide a longer-term review and activities that can be affected by council activities and partners.

First of all, I wanted to touch on NOAA activities. The NOAA Fisheries Climate Science Strategy identified one of the most significant actions to be accomplished throughout the country, the development of climate vulnerability assessments, and, in the South Atlantic region, we just received a report, at our last Habitat and Ecosystem Advisory Panel meeting, on the advancement of the South Atlantic Climate Vulnerability assessment, which has been spearheaded by the NOAA Beaufort Lab.

It is coming to a conclusion and advancing to support getting information to be able to provide that into a context of really understanding the likelihood of any of the species productivity and abundance or distribution will be affected by the changing climate in our region. Those are going to be used to prioritize any longer-term ecosystem analysis and any research plans, and they can also support one thing that I will touch on, that is really beginning now, is some climate scenario planning, a multi-regional effort.

The climate report, or the climate vulnerability assessment, is just one of the two major parts that are moving forward that are going to provide context on the broader ecosystem context, but having the climate implications. The South Atlantic Ecosystem Status Report for the South Atlantic Council is also being developed, and that is, I think, closer to being completed, maybe within the month, and, again, this is being spearheaded through the Beaufort Lab and is advancing. This document provides a synthesis of all the scientific information on a number of ecosystem components, including the communities, human communities, as well as it's supposed to be a concise report that the council can respond to and apply into dealings with broader ecosystem considerations.

One of the indicators that is presented within this are some of the climate drivers, but, also, it doesn't include everything from physical and chemical pressures that may be in our region, such as acidification and temperature, to different states of habitat and how the implications are going

to be for changing habitat distributions, as well as the implications for trophic levels, lower trophic levels of species and the upper, in terms of abundance diversity and how the implications and considerations are on that, as well as any of the ecosystem services that may be provided for the region.

In combination, those two are advancing, and hopefully will be completed in the not-too-distant future, and Todd Kellison can provide any more additional detail on that, because he was kind of providing the oversight to advance and move things forward on those different activities, and so those are going to provide some pretty key foundational information for our region to move forward on climate and some of the ecosystem activities.

As I mentioned, these are also connected into -- One of the activities that is just getting underway is an East Coast Climate Scenario Planning Initiative, and this, to some degree, was built out of some coordination that was initiated, literally, a number of years ago and discussions with our counterparts in the Mid-Atlantic and New England regions on what to do about shifting species, and, back in November of 2020, the Northeast Regional Coordination Council agreed to move forward with an East Coast Scenario Planning Initiative to explore some of the issues on jurisdiction as well as climate change and shifting fisheries stocks.

What has happened is that the effort is being spearheaded with the NRCC, in combination with the South Atlantic Fishery Management Council participating, to cover the entire region, and the scenario planning is intended to be a tool that can be used to test decisions, develop strategies, and really look at it in the context of what some of the uncontrollable and uncertain environmental, and even the political and social and economic and technical factors may be.

It also is a structured process for the managers to really go in and explore how, under different multiple scenarios you consider, how to adapt to those different conditions. It is not a tool, though, to predict future conditions. It's rather really intended to be an effort to create stories, or scenarios, that really give you about kind of different plausible combinations of future conditions and then what some of those uncertainties are, and that provides the ability to respond to specific focal questions on the basis of these different challenges.

This process is, as I mentioned, just underway, and one of the first things that happened is -- The first part is orientation, and, to advance this process, a core technical team was developed, of which I am the designated representative for the South Atlantic Council, and I have counterparts in the Mid-Atlantic and New England and at the Greater Regional Office, as well as Atlantic States Marine Fisheries Commission. That team is helping spearhead what is being provided as a first process, and then also being looked at some objectives and how to advance this.

Just generally, quickly, and this is just literally getting brought forward to the respective councils and ASMFC for consideration, as well as the NRCC to look at this process, but it involves going to scoping and looking at what this type of process involves, and that is where we would be going after some of these initial discussions that would occur and what that entails and how you involve existing partnerships at the council and other levels and advisors, and that's to be developed.

The idea is that you go through that initial phase of understanding it, and then you begin to look at identifying what some of the uncertainties are and then setting the stage so that you could actually have a workshop to work with stakeholders to develop some of the different scenarios under

different timeframes, under different conditions, so that that could be something to respond to. The idea, from that, is, once you do that, you advance then to a more full workshop, where you really look at what the implications of those different scenarios would be. Looking at the timeframe, that really goes into 2022, as this advances into the future, and so that's just a quick snapshot of the process, the coordination, and the effort that is underway to try to advance our understanding and really get to the issue of what some of the implications are with the shifting stocks in our multiple regions and how to address those, from the science as well as from the management standpoint.

The key with this is that it also provides the kind of near and long-term management priorities related to those different scenarios that might be developed, and it also gives us a better understanding of the limitations of the systems. How fast can they respond? Some of these issues that have come up in the past, and primarily the Mid-Atlantic has had more of these issues internally with some of the species they manage, but the ability to react is something that needs to be considered.

Also, any of the policy recommendations for how you address kind of that same regional and broader governance changes that would improve the ability to respond to different scenarios, and then, of course, the real list of data gaps and research needs and monitoring needs for these changing conditions, and I think those, in some regions, have been pinning down more, and I think we still have a fairly long list of things that we really need to know.

What is going on is that the councils are having updates, and the Mid-Atlantic and New England have had updates on just this process and what's come out of the core team, and it's going to be going to the South Atlantic Council for discussion in June, and the NRCC is going to meet and look at some of the process and some of the discussions on objectives in May, and we'll actually have the benefit of that at our June meeting, to see how they respond, but that sets the stage for the longer-term view on climate in our region.

The combination of those different products being developed by NOAA, and this collaborative effort being advanced through the entire Atlantic is going to be a critical piece to advance our understanding as well as our collaboration on addressing climate change throughout the entire region.

Other related climate activities is our council responded to the climate Executive Order. We provided a response and really focused a lot of the needs to address different things such as, again, some of the research and long-term monitoring that occurs through our fishery-independent surveys and others, the MARMAP and SEAMAP and SEFIS and making sure that those are collecting the information and addressing it and that they're fully funded to be able to support the types of information that will be needed to advance these different efforts on climate, as well as the need to address some of the systems, such as MRIP and different ones, to be able to be more responsive to rapidly-changing activities and to make sure that there is considerations of impacts at the state and local levels on understanding how these different -- Those are just some of the key areas that were touched on.

The council, also, through the Habitat and Ecosystem Advisory Panel, is updating some of their essential fish habitat policies. Right now, one of the ones that is advancing is beach dredging and renourishment and large-scale coastal engineering, and that will be becoming more of a climate-

ready type of a policy, addressing other issues that are moving forward, but the intent is, as possible, that the rest of the policies also be brought up to that type of character.

On a technical aspect, the council has finalized, or coordinated, to develop a South Atlantic Ecopath with Ecosim model that is going to be advanced, and it's gone through the SSC review, and it was identified as being able to begin to be evaluated for understanding different implications for management, and the only reason I raise that is that one of the modules to be built in the future is called Ecospace, and that really provides the ability to integrate oceanographic, environmental, a lot of other types of information that will then provide you the ability to really look at some of the implications of ocean character and habitat and other changes in managed species into the future. That is, I think, a lot of the activities that are going on relative to climate change in our region, or have an influence on what we're doing in our region, and I will take any questions at this time.

MR. HULL: Roger, I see Todd's hand up there, and I don't know if he wants to add something. I don't see any other questions from the AP.

DR. KELLISON: Thanks, Captain Jimmy, and thanks for that update, Roger. I was just going to add, to the group, that Roger mentioned the climate vulnerability assessment and ecosystem status report, and I just wanted to convey that both of those efforts are being completed, or are completed, for all of the NOAA Fisheries regions, and they're sort of big-picture climate and ecosystem assessments, and so the -- As Roger mentioned, we recently gave updates to the Habitat Protection and Ecosystem-Based Management Advisory Panel, and, if there's ever interest by this group, we could provide those presentations as well, but I will certainly keep the group updated as those documents are finalized, which will be relatively soon, hopefully quite soon.

MR. HULL: I don't see any other hands, Roger.

MR. PUGLIESE: Thanks, and I will keep you posted as these different activities continue to evolve.

MR. HULL: Thank you, sir. Mike.

DR. SCHMIDTKE: Jimmy, I think we're ready to move to our next item, the Chair and Vice Chair election.

MR. HULL: Okay. We're ready to move on, and I gave you all a preamble yesterday of where we're at on that, and it's up to you guys, as to what you want to do. There is the option of another year, stretching this out, and I have talked to Robert, and he's willing to do that, and I'm willing it, or I'm sure you guys may -- If you want to elect a new Chair and a Vice Chair, then have at it, and it's up to you all. I see some hands raised. The first hand is Jack Cox. Go ahead, Jack.

MR. COX: Jimmy, I was just thinking that -- I know I miss it, and I'm sure that everybody else does, but when we get together and have sidebar conversations, and really feel each other out and see who wants to do this, and I was just going to put it out there that, if you would be willing to, Jimmy, if you would just hang on a little bit, and I feel like -- I really feel like we're going to have an in-person meeting this fall, coming up, and we could get together and maybe discuss this in

person, and I was kind of seeing if you and the Vice Chair would be willing to stay on until we can do that.

MR. HULL: Thank you, Jack. I have already indicated that I would, and so did Robert, but let's hear from others. Randy McKinley, you're up.

MR. MCKINLEY: I absolutely second what Jack said.

MR. HULL: Rusty.

MR. HUDSON: I third it.

MR. HULL: James.

MR. PASKIEWICZ: **Well, how about I go ahead and make the official motion to have both Jimmy Hull and Robert Lorenz stay on as Chair and Vice Chair for one more year, two sessions.**

MR. HULL: Right on, and I think it was seconded and thirded, but I can't remember exactly by who, and maybe you've got that, but I see Vincent. Go ahead.

MR. BONURA: I will second that for James there, and I think you do a really good job as Chair, and Bob Lorenz does a great job as Vice Chair, and I think a couple more meetings would be great, and we can get back into the in-person, and in-person is the way to go.

MR. HULL: All right. Thank you. With the motion, we'll go ahead and -- **If you will clear the hands, and, for anyone that's opposed to that, raise your hand. I see no raised hands.** We'll move on to the next agenda item, which is Other Business, and I know that we have some, and so I had a request, early on in this agenda item, from Andrew Mahoney, and so, Andrew, you were the first one on my list, and so you right ahead. If you're ready, you've got it.

MR. MAHONEY: Thank you. I know that we talked, last time, about the two-for-one a little bit, and that it's going to come up in the next meeting in September, and, after listening to this meeting, there is a lot of folks with great ideas and great minds that are coming out of our fisheries. James and Andrew Fish, I mean, they have great ideas, and Jack and Randy up in North Carolina have great ideas, and I just can't help but be saddened by the wall that has been built to keep more great minds from coming into this industry and kind of see where the trajectory of our fisheries would be, had we built a bridge instead of a wall.

After hearing some of the people's comments in the last meeting, and seeing that it's kind of split up between the people that want the two-for-one to continue and the people that want it to be discontinued, it seems like the proposal that I've sent you all is a good compromise, in order to get us moving in a better trajectory as a fishery. I'm kind of hoping to hear other people's thoughts on the proposal, and maybe it can come back to me at the end, and, if I have anything else to say, maybe I can wrap it up. That's all.

MR. HULL: All right, Andrew. Thank you. We'll go right to James Paskiewicz. You're up.

MR. PASKIEWICZ: I seem to be drawing a blank on this. Have we reached, or was there ever a target number of permits to get down to, when the two-for-one was implemented?

MR. HULL: Well, I can't answer that. Staff may be able to, but I recall this question has been asked before, and I don't believe there is a target. That's just my belief, and I believe it was put in place because the commercial sector was deemed to be overcapitalized, and they wanted to find a way to reduce the fleet, and that was their way of doing it, and so that would be my answer to it, but maybe staff or council members could say that maybe there is a target, and I don't know.

MR. PASKIEWICZ: I believe the number is under 600 now, and we're getting to a point that -- Andrew is really getting to the heart of this, and that is that, if we keep getting reduced, there's not going to be anything left for future generations. I mean, at what point is 600 too many? I mean, if the fishing is going downhill, it's not going to be because of 600 South Atlantic snapper grouper permits, and we need to maintain some viability in the commercial industry, in order to say that it is shared resource among all walks of life, and so I think this is a very, very important topic to be discussed here. Thank you.

MR. HULL: Thank you, James. Rusty, you're up.

MR. HUDSON: Since I jumped in on this red snapper stuff in 2009, in my consulting business, wanting to find that basement spot for this two-for-one, and, yes, for years, we have been trying to get that answer, but, for years, there were certain council members that didn't feel we were there yet. I think it should be analyzed and detailed, as to how many we've lost already, because of the retiring the one, and we have a similar problem like with shark, like with the limited-access permit there, and, when somebody doesn't renew it, it goes away forever, and there is no mechanism to add to that, and this could happen here, ultimately, and so I would like to see that threshold of what is considered enough is enough on the two-for-one, because I believe we're already there, if not too low already. Thank you.

MR. HULL: Thank you, Rusty. Randy, you're up.

MR. MCKINLEY: I had a couple of things, but, this one, with the two-for-one, I will get to it first, since that's what we were talking about, and I think it's great, and I was glad to hear that they were going to bring it up at the next council. In reference to Andrew's proposal, his heart is in it, but I feel like, right now, the thing to do is to white paper it and have all the different discussions possible that we can have, pros and cons and whatever, and I know there's issues on both sides, but it is no doubt time to have that discussion, and I'm sure that we can come up with some kind of creative solutions that benefits everybody and addresses all of that. I think the thing to do, first, is to do the white paper, to get all the discussions, and then come in with some specific proposals.

One other thing is that, yesterday, I had to step away for a few minutes, and I'm not sure who presented it, but it was the council research, Attachment 9, and I didn't know if that was like a wish list or just the things that the council was pursuing, and I was real glad to hear that they talked about the frequency of the recruits of red grouper coming maybe from the Gulf, and I think that is just wonderful, because I think something went on there that harmed our grouper fishing up in North Carolina, and I'm very glad to hear the remarks about some small grouper showing up to the south.

I've just got to bring up one other thing, and that is the fact that, even with all of the apps and everything that's done, it's all with the best intentions, but, if enforcement isn't part of the problem, and I know that's not all the council, but it's NOAA and it's everybody, but it's got to come together. I think, up in North Carolina, I think what you've got, especially in the deep water, is you've got a small number of people doing great damage, whether it's commercial or it's recreational, but, somehow, they've got tie in enforcement.

In North Carolina, the Marine Fisheries just don't have any teeth, and they can't search boats. If they just -- Somehow, that has to be a part of all this planning, because, if you're leaving out -- The people that are going to do the illegal stuff, they're not going to sign up, and they're not going to get the permits, and they're not going to use the apps, and so all that data then is being missed, and it's just too important, and I think enforcement just has to be part of it, however it's coordinated, but, anyway, that's what I had. It's been a great meeting, and that's what I had to say on that.

MR. HULL: Thank you for those great comments, Randy. I appreciate it. Jack, you're up.

MR. COX: Jimmy, I'm all about seeing newcomers come into the fishery. I mean, I see it all the time. Like I said at the last meeting, I had a guy that wanted to come into the fishery, and I sold a permit for a little bit less than what I had in it, the \$60,000 range, but, when I look at this and where we've been, and I was in this fishery when we had over 2,000 participants in it, and, looking at the technology and the way the fishery is going and being in the fishery for thirty-five years, I just don't see capacity able to increase in the commercial sector.

I mean, our technology has gotten so good that -- Just look at this meeting, and let's talk about the assessments, and let's look at how healthy do we think this fishery is, and I don't think it's that healthy. I mean, we've got amberjack that looks good, but what about our tilefish, and what about our gag groupers? What about our red groupers? We've got some problems, and we -- I don't think the permits are decreasing. I think the commercial permits are kind of where they are, and most of them are going to corporate. I've got one out there for lease for \$8,000, which I think is a very good value on a permit. I've got captains making over \$220,000 a year in the fishery.

They're not making that, but they're grossing that, but that's still a -- When you're looking at investing in the fishery, it's still within reach, very much so, but my concern is that I just don't think we're there, and, if you were to ask me what number do I think we need to be at for a viable full-time commercial fishery, it's certainly less than where we are, and some people may be upset with me saying that, but one of the reasons that some of our fisheries are not closing early, like they used to, is because the fishery is just not there. Thank you.

MR. HULL: Thank you, Jack. Harry, you're up.

MR. MORALES: Well, I don't have a dog in this fight, but, being a newcomer and listening to the commercial argument, it would seem to me that a path forward is really what Andrew is talking about, and no one seems to have any light on what is the plan, right? We're doing all this talking about stock assessments and what we're trying to get to and the thirty-year battle with the red porgy, and we're still working at it, and I guess I'm not hearing what kind of plan is there for the commercial fishery going forward, and, if he's right, that there are enough commercial fishermen, okay, and so what are we talking about? Is it a 20 percent reduction on the current set of licenses?



At what point can we consider being on the other side of the curve, if we're on the wrong side right now?

I just believe that this AP should probably have a recommendation that sheds light on the future of the commercial fishermen, and I'm not qualified to do that, but I'm just, as the newcomer here, listening to this, and it just makes sense that we have clarity on where we're going forward, and that's it. Thank you.

MR. HULL: Thanks, Harry, and, as a private recreational representative, and a fisherman, I appreciate all your comments, and I think, just to throw something back at you, imagine the question being to you about the private recreational sector. Where is the capacity? Where should it be for that sector? As we reduce the commercial sector's ability to prosecute the fishery, it's just being gobbled up by the recreational side on the other end, and so you're taking away from this side, and it's being consumed on the other side, but that's just something that I wanted to throw in there. Rusty, you're up.

MR. HUDSON: Thank you, Jimmy. Going back in time, when they decided to limit the access to the snapper grouper fishery, and they divided it into an unlimited snapper grouper, or SG 1 permit, the couple-thousand, and it may have included what's called the SG 2, the 225-pound-trip-limited family non-transferable one, and, well, when I looked at the portal just now, the grand total of SG 1 unlimited is 519, of which only 484 are currently re-registered, which is an annual thing they have to do, normally. The SG 2 has dropped from the level that it was at, and, of course, it can't be transferred, and it can stay in the family, I believe, and that grand total is ninety-seven, but only eighty-four are active.

Like I say, when people die, and some people don't get this stuff transferred, those things might just disappear, go away, and so it's just something that you all need to think about, because, like Jimmy pointed out, the recreational fishing component, we don't know how many people from North Carolina to the Florida Keys are actually fishing, and I do know that it would be useful, because I believe, on some of this other analysis, on the SG 1, that, down in the Florida Keys, there's a -- It's like a world of its own, and so we need to see how many of that Florida component is compared to the Florida component that's up the east coast, up to the Georgia line, and then just break out Georgia and South Carolina and North Carolina and just see what of these 519 unlimited permits -- Where are they? Somebody could sit down and actually count some of that, and so some of those boats might be mobile too, and go from North Carolina to the Florida Keys and back and forth, like we used to do in the old days. Thank you.

MR. HULL: Thank you, Rusty. Jack. I think Jack's hand is gone. Vincent, you're up.

MR. BONURA: I just wanted to add something here to think about. From what I hear, a quarter of all the boats, permits, vessels, whatever you want to call it, a quarter of them catch all the fish, and, I mean, not all the fish, but they catch the biggest majority of the fish, and what happens if all 519 boats go out and catch good? I mean, our ACLs are going to close up real quick at that point. I mean, if 125 permits are catching most of the fish, what happens if they all go fishing?

MR. HULL: Thank you, Vincent. That's a good comment. Robert Lorenz.

MR. LORENZ: I'm a recreational fisherman, private boat, in North Carolina, but I do get very involved in economics, through my affiliation with UNC-W's Center for Innovation and Entrepreneurship, and so it involves business decisions. The only thing that I might like to add, and because this topic has come up from time to time, and we had an AP member who was very passionate about this, and he fished out of Largo, and so I would just like to add something to whoever puts out the possible white paper that explores discussion and options, and that's to add and to put in an economic analysis or a survey of commercial fishing to determine the value of snapper grouper permits to them as a retirement asset. If you get in a situation where you issue more, and you get more people in the fishery, and the permits you have become less valuable, and I think you'll hear from a few folks that are -- It's a savings account for them, and they like it for that reason. Thank you.

MR. HULL: Thank you, Robert. Any more -- Andy Fish.

MR. FISH: One of the ideas thrown around my neck of the woods was to take back all the permits and redistribute them as all -- Like make them equal. Like there's a corporate permit, which is basically equal to two, and the regular like the sole proprietor, which is equal to one, let's say, and one of the ideas was to take them all back, if they want to do something like this, and make them all equal.

That way, you're kind of getting rid of the two-for-one, but I think, if you got rid of the two-for-one, I think, economically, those prices are going to even out, so to speak, and I'm not an economist, but I think, if a two-for-one is worth \$100,000 now, and a regular one is worth \$50,000, if you get rid of the two-for-one, they're going to pay the value of -- It's going to either meet in the middle, and I don't think they're going to both go to \$50,000, and I don't think they're going to both go to \$100,000. I think, if you did away with that, you're really kind of right back where you were, as far as this young man trying to get into fishery. That's just something to throw out there, I guess.

MR. HULL: Thank you, Andy. I agree that the value would pretty much maintain itself when the two-for-one -- The individual and the corporate would be of equal value, once the two-for-one disappeared, and that would be my impression of it. Robert Freeman, you're up.

MR. FREEMAN: The majority of our effort has been how to deal with diminished stocks of fish. Why would we do something that increases the pressure on the fishery?

MR. HULL: Thank you, Robert. Andy Fish.

MR. FISH: Sorry. That was entered in error.

MR. HULL: No problem. All right, AP. Do you have any more comments on this? I see someone coming in. Jack Cox.

MR. COX: Jimmy, there's a lot of us that are getting older in the fishery, and that are not fishing as much, but I can tell you what I'm doing, with my experience in the fishery, for people like Andrew Mahoney, and I've got a guy who is twenty-two years old, and I'm grooming him to take over and do what I've done, and as much as helping him get a boat and get his license, his North Carolina license, and just to groom him to take over, because I want to see this younger generation

be successful, and I've got a lot invested in the fishery, and I've got a deal set up with him to help take me out of one of my boats and permits, and so he's going to do that, just like with any business.

He's going to help buy me out of it, and I still enjoy, in my retirement age, to get on the boat and go with him, every four or five or trips, to pass the knowledge on. I don't want that knowledge to go to waste, and it's one of the reasons that I'm here on the AP, is to give back, and it's certainly not for any other reason. I don't have any personal gain that I'm trying to get out of this, but just to give back to people like Andrew, and I want to figure out a way for him to be in this fishery and to be successful.

It's very important that we have that generation of folks coming into it and to provide all these retail markets and consumers with what we're trying to do here, but just I've got so much invested in it that it hits a nerve when I feel like we're going to do something to lessen the value of our investment, but, at the same time, I want to be fair and help these people enter the fishery, and I will do whatever I can to help them, whether it's fishing numbers or whatever it is, and pass the knowledge on, and so I don't want to come across as that I don't want to see anybody else getting in the fishery. I certainly want that, and that's what has happened, because a lot of us guys have been in it for a long time, and we've got to figure out a way to keep it going. Thank you.

MR. HULL: Thank you, Jack, and, personally, I agree with a lot of what you said. I can tell you that my permits, my boats, employ, directly or indirectly, hundreds of people in the different businesses that use those products, and we have to maintain those vessels, and so there's lots of jobs and lots of lives that are being affected by having these permits working the way we have them, and I agree that there's lots of young people that work for me that are running these vessels, and they do have the opportunity to participate in the fishery. Rusty, you're up.

MR. HUDSON: Earlier, someone mentioned a white paper, and I would like to see the council, at the June meeting, put together an effort to create a white paper so that we can have that in our hands that we can then do a discussion, whether we do a virtual meeting next time or actually a face-to-face, and, that way, we'll have some answers in front of us. Thank you.

DR. SCHMIDTKE: Jimmy, just throwing in a comment on timing there, for the potential of a white paper, the most likely timing would be that that would be directed to staff to develop that following the council discussion in September, but it would still -- Like it would still be something that could go to the -- It could be developed for the AP meeting in the fall.

MR. HULL: Roger that. Thank you for that information. Andrew.

MR. MAHONEY: I appreciate all the comments, and that's some really good stuff there. I think that dealing with the possibility of more pressure on a stock -- It's going to be helpful to inject more knowledgeable harvesters into the industry at a lower limit per trip than the current permits that are going, and I think, in the long run, it's going to be beneficial to all of us, and that's all I've got. Thank you.

MR. HULL: James, you're up.

MR. PASKIEWICZ: Kind of going back to what Jack's point was, with us, I'm probably one of the -- I wouldn't say older, by any stretch, and I'm forty-two, and I'm maybe even one of the

younger fishermen to have really thrived, I guess, with the snapper grouper complex and as a snapper grouper fisherman, but, personally, I have tried, several times, to launch my brother's career, best friend's career, get them involved with the viability of our resource, and primarily meaning yellowtail snapper, because we've heard some very positive things, and we try and pass this knowledge along, and we run into brick walls, where the younger generation of fishermen wants instant success, and they don't understand the twenty-year process that it took to become successful and to be out of debt and to really grab the bull by the horns and go after something because you're passionate and you believe in it. That type of drive and determination, at least in my experience, is not there when you're injecting somebody new into a fishery.

Now, I cannot speak to the types of fisheries above the State of Florida, but, here, guys don't want to work. Three months in, they're saying, man, I thought I was going to move up a lot quicker than this, and it just -- It's hard to really captivate the work environment and get these guys to buy-in to what it actually means to be a commercial fisherman, and those are just my experiences. I actually have a hard time with Andrew Mahoney not finding a way to easily enter this fishery, and I think that the opportunities are there, and so that's just my take on some of this.

MR. HULL: Thank you, James. Randy, you're up. I see Randy's hand is down.

MR. MCKINLEY: No, I'm up.

MR. HULL: Okay. Go ahead.

MR. MCKINLEY: I just wanted to respond to Jack and some of them, just to dispute it a little bit, but I'm just glad that we're having these discussions, and I'm sure there's going to be a lot more, but I hate that the commercial industry seems to -- They're afraid of more coming in and catching, where a lot of this is being taken by recreational, and it's not commercial. I don't think that small fleet is hurting, but it's not just the ease of getting the people into the industry, and it's the fleet is ageing out, and it's to help transition out. If you did away with the two-for-one, it would just make it so much easier, and I think it's time to discuss that.

In response to a lot of 500 boats coming out there, I'm going to tell you one thing. The fleet is ageing out, and the experience is leaving, and I'm agreeing totally with what James said. I couldn't find probably two captains right now, in a big area in this part of North Carolina, that is even capable of going out there and producing a catch. You may have 200 or 300 or 400 boats out there, but there is very few that know what they're doing that are going to consistently catch fish, and that is going away fast, and so the worry about a whole bunch of boats going out there and catching fish --

In North Carolina, that's not going to happen, because the experience is not there, and these guys are ageing out or dying or whatever, and we've got one guy now that they give him about thirty to ninety days to live, and he caught a lot of grouper up here, but there's no one to replace that, and so the fear of all this pressure coming is just not going to be there, and that's all I had to say.

MR. HULL: Well said, Randy, and possibly, Mike, you could maybe put a little bit of that in writing there, that the fleet is ageing out and it's hard to find people willing to come in and work, and build and grow, like basically start as a dishwasher and end up as an owner, and so I don't know how to put that, but that's kind of the way I see it too, is it's tough to find young people that

want to get into it and are willing to put the time and effort. It's a life. It's not a job. It is a life. Andrew, you're up.

MR. MAHONEY: Thank you. I appreciate James' comments there about trying to find an easier path or whatever, that he's having a hard time with coming to grips that I'm having a tough time, but we don't really have, where I live, a Jack Cox to take people under their wing, or other fishermen, and I'm out here by myself, and I fish by myself, and it's just there is not the opportunity here. I've never known anybody that's selling a snapper grouper permit, and it's just not really the opportunity that you all have in other places that we have here, and I think having a difficult - An easier path with a difficult outline to create an easier path, for fishermen that are motivated to be good, conservative harvesters, is going to have those people shine above the others that you say you see that just don't want to work, and so I think this plan, and this proposal, addresses a lot of that. I noticed that I haven't heard many people address the actual proposal, and so I'm kind of interested to see what people think about the proposal, to be honest with you. That's all. Thank you.

MR. HULL: Jack, you're up.

MR. COX: I would just say that most of the old guys from the Morehead City area have aged or died out of it, and the average age of the snapper grouper fisherman now in my area is probably thirty-five to forty years old. Somehow, they have figured out how to do it, and they're not traditional five to ten-day boats, like we used to have. Most of them now are fishing on the smaller boats and spending the night on them and coming home on twenty-four-hour trips, but I would be happy to supply Andrew with some names of the guys who are in their thirties who are making a business out of this and that he could reach out and maybe ask them how they did it, but the average area in the Morehead City area are now the thirty-five to forty-year-olds. Thank you.

MR. HULL: Cameron.

MR. SEBASTIAN: Just, if we're talking about looking at doing away with the two-for-one, at the end of the day, that two-for-one, or that corporate permit, has value, and I would hate to see somebody who has been in the industry and paid a good value for that permit to all of a sudden have it cut in half, and the other thing wrong with that is we really don't know --

We say that, hey, everybody is getting out of it that's older, and there's some younger guys in it, but we really can't predict the future, and we really can't predict that, hey, guys don't get in it and become exceedingly effective, especially with power heading being legal now and the technology that all the satellite positioning and things of that nature, that guys couldn't get in it and, all of a sudden, become relatively good at the spearfishing and power heading in a relatively short period of time, and then you start to see issues with quotas down the road. I'm not saying it will happen, and all I'm saying is we don't know, truly, what the future will hold, and it could have negative effects, if a lot of people did get into it, especially using the powerhead, and it's a very, very effective, fast method of taking a lot of fish out of the water.

MR. HULL: Thank you, Cameron. James.

MR. PASKIEWICZ: Thanks, Jimmy. Andrew, I know that you asked about what we thought about your proposal, and I read it, front to back, when I first got it, and I went over it a little bit

this morning, and I can tell that a lot of thought and effort went into creating that proposal, and I don't want to say that, no, I don't like it, but, speaking from the heart, that's my overall opinion.

You create -- With that, yes, you're creating opportunity, and, yes, you've done everything, and you've outlined every possible scenario to help keep that particular individual accountable and law-abiding, and there's a lot of good points in there, and there are some great exceptions, like the VMS provisions and keeping every new entrant monitored and excluding the existing permit holders from having to do the VMS monitoring, but, ultimately, I just -- I don't see this, for this fishery, being something that would be a positive to adapt. Again, I'm sorry, given the amount of time that you spent on it, and really good analysis, but just -- I don't know how many of the other panel members have really gone through everything that you have outlined there, but, for me, I don't really think it's a viable solution. Thank you.

MR. HULL: Thank you, James. Vincent, you're up.

MR. BONURA: I don't think I got this proposal that everyone is speaking of here. Did it come in an email, or where is this proposal at?

MR. HULL: Yes, it was emailed to the entire AP by Andrew, some time ago.

MR. BONURA: All right. I guess maybe I wasn't included in it, because I don't think I got it, but I would be willing to speak with Andrew, off the record, if the staff could give him my info, and I would like to have a chat with him here in the next couple of days, and that would be great.

MR. HULL: Thank you, Vincent. I think we can get you guys connected. I appreciate your willingness to contact him. Rusty.

MR. HUDSON: Thank you, Jimmy. Recently, I had tried to find phone numbers and email addresses for each Snapper Grouper Advisory Panel member, and also my Mackerel Advisory Panel members, and it doesn't exist anymore, except for a name. They have decided to keep private our email and our contact telephone number, and so I would suggest that there needs to be a mechanism so that we can do outreach amongst ourselves, so that we all know the number and the email. Thank you.

MR. HULL: I agree. Thank you, Rusty. Robert Lorenz.

MR. LORENZ: Jimmy, I just wanted to put my Vice Chairman's hat on for a second, and, really, I'm just trying to stimulate some conversation, or at least have documented what I thought was a very important point in this for Andrew Mahoney's proposal, and one thing that was brought up, and it doesn't impact his proposal directly, but it does impact this two-for-one policy and all, and I really think -- There is nothing in there that captured what either Randy McKinley said or Cameron Sebastian, and it is what effect -- What is the problem for some of the declining stocks in the snapper grouper fishery?

Could it be just the people in it, commercial fishing, there isn't enough there for the numbers, or what if it isn't anybody's fault, and it's the outside influences that -- We spoke of divers and powerheads, and they probably have a permit, but Randy also mentioned about private recreational fishermen, and he's right. Randy and I only live about eighteen miles apart, and it's not unusual,

when I went out for red grouper -- There were forty of us recreational, and there would be maybe one out there, one commercial boat, snapper grouper fishing and using a bandit rig. I don't know how to capture it, but, if somebody wants to, I think it's kind of important to put in here that the cause of the reduction of the fish is kind of important to this decision in the long run, to be fair. Thank you.

MR. HULL: Okay, Robert. Thank you. That's a good comment, and I think that kind of what you're saying is who is consuming the resource, and where is the resource going? Is it just disappearing because of environmental factors, along with the recreational sector and the commercial sector all combined, or is it no one's fault, or is there too many of one or too many of another, and do we need more, because that's what we're talking about. You're right on target. Cameron Rhodes.

MS. RHODES: Thanks, Jimmy. I just wanted to follow-up on some of Rusty's points about the membership listings that are currently available from the website. I just wanted to provide some clarification that those decisions were made for security reasons, and so we had spoken to a number of different agencies that operate with similar membership, and they felt, and so did we, that it was a security risk to have everybody's personal information listed from the website, and so, if you would like to send an email, we will provide that contact information to you. Just let us know, and we'll be glad to share that information with you.

You can also get that information from the emails that you receive. Typically, when staff send out a blanket to everyone, the emails are listed there, and so you should be able to see it there. If not, you're more than welcome to contact me, or Kim, or the staff lead of your AP, and we can provide that information to you on an as-needed basis. It's not done in order to prevent you guys from speaking with each other, but it's just those decisions were made based on security reasons and based on counsel that we received. That was in the best interest of you as individuals.

MR. HULL: Thank you, Cameron. You were cutting in and out a little, but I think we got the message that, if we need to get contact information for each other, all we have to do is email you or the AP staff lead or Kim, and we can get that. I appreciate that. Rusty.

MR. HUDSON: I like that, Cameron, being able to contact you, but I still believe that, as AP members, you could just supply us an entire list of the active AP members, and I can't remember if you all still have our tenures up on the webpage, and I know some of us, like myself, this fall have to re-up if we're going to be around for a third tour of duty here, but I just also know that sometimes, when we get the emails, whether it was for the different APs, sometimes it will just say like Snapper Grouper Advisory Panel, like it's one big package, and we don't get to see the breakdown on that, unless somebody has replied to the person that sent that, and so thank you very much for the alternative.

MR. HULL: Thanks, Rusty, and, to that point, I saw that change, where it's just one grouping of AP, and you really can't get an individual pulled out of it. Okay. We're doing good. Anybody else? Any other new business, other business, from you all that we can get into? We've got about twenty-eight minutes left here, and so is there other business for the AP that you guys want to bring forward? Bring it forward now. Jack Cox, I see your hand is up.

MR. COX: I was just curious if we could figure out a way of what the average age is of our fishery. I mean, if there's any way we could do a survey and find out what the permit holders -- What their age is, or not even the permit holder, but the people fishing in the fishery that are fishing under a permit, and are we actually -- Are we a graying of the fleet? Are our fishermen fifty or sixty years old, or seventy years old, or are they like I'm seeing here in Morehead? Are they the guys that are in thirties, and what their thoughts are, and it would be interesting, and I would like to see more of the young folks on some kind of survey and figure out who they are and how they got into the fishery, maybe to give some insight to people like Andrew, if they're trying to find a way.

MR. HULL: Thank you, Jack. On the same subject, new entry and a possible white paper, and I think that the council staff, years ago, had a document and a presentation on commercial fishing portfolios, and there was a lot of information there, and that was a really, really good presentation on the commercial fishing industry and who depended on these different permits and who held permits and which area they were held. I mean, it was comprehensive. I think that's something that should be included when you do get this white paper going, just as information in the white paper, because there was a lot there. Your hand is still up, Jack. Do you have more?

MR. COX: I'm done, Jimmy. Let me take it down. Thank you.

MR. HULL: Andy Fish, you're up.

MR. FISH: I would also like to know how many are owner/operators of these permits and how many are actually being fished and how many are latent and stuff like that. I mean, there's a lot of names in the fishery, but there's a lot of guys that own a lot of permits and either lease them out or have other people run their boats, and not that there's anything wrong with that, but it's just another interesting data point. That's it.

MR. HULL: Good point, Andrew, and I think that information is in that portfolio, and I could be wrong, but it was several years ago, and maybe it needs to be updated, but it was really good. It was comprehensive, and it was done by the council staff, and so it's available. Jack.

MR. COX: Jimmy, just under Other Business, I would love to see a federal license, like we have for the snapper grouper fishing, for the recreational industry, because I just would really like to know the participants and what's going on with our fish. I'm concerned that our fishery is overcapitalized, and I don't know what to do about it. I mean, we're cutting trip limits down and this and that, but we've got to figure out who the participants are. We talked about that, but I would just -- I am very interested in it, and I think that we should put pressure on the council to get a federal license, just like the snapper grouper guys do, for the recreational industry. I certainly don't see what's fair for one side is not fair for the other, and I would make a motion on that.

MR. HULL: Good. Why don't you go ahead and make that motion, if Mike is ready.

MR. COX: Okay. **My motion would read that we ask the council to consider requesting National Marine Fisheries Service to have a recreational federal fishing license, permit, just like we do for the -- Like we make the snapper grouper guys do, the commercial guys.** I don't think we'll ever get to a place. I mean, we go around and around and around with this, and we want to ask them to do this. I mean, if the hammer came down and said this is what you will do if



this is how you want to participate in the fishery, and I don't think it's right if one side has to do it and the other doesn't. All we see on the news is equality, and that's certainly not equality.

MR. HULL: Okay. Can you see the -- I don't think you can see the motion. I will read it. **Recommend the council consider requesting the National Marine Fisheries Service to have a recreational federal fishing license.** That's pretty broad and pretty simple. Is that good enough for you? Do you want to add "in the snapper grouper fishery" to that?

MR. COX: Yes. Jimmy. **In the snapper grouper fishery.** Thank you.

MR. HULL: Okay. Right now, I'm going to look for a second. James, you're up.

MR. PASKIEWICZ: I wholeheartedly second this motion. Thank you.

MR. HULL: Okay. Good. So it's seconded by James, and so we'll have some discussion. Andrew Mahoney, you're up.

MR. MAHONEY: I was just going to second it myself. Thank you.

MR. HULL: Very good, and so you obviously support it. Chris, you're up.

MR. KIMREY: I was going to second Jack, but I guess there's no need to.

MR. HULL: That's good to hear from you, and so it looks like you have a lot of support for this. Chris, you're up.

MR. MILITELLO: I just wanted to comment, and I hear a lot of this, and guys know a lot, but, when you guys talk about, the commercial guys talk about, why do we have to fill all this paperwork out, and why do we have to do this, and the rec guys don't have to do it, well, you have to do it because that's your job. Your job is to fish, and my job is an insurance guy. When I do your boat insurance, I've got to fill all this paperwork out, and it's part of my job, and I understand there needs to be better ways to track what the recreational guy does, but don't complain about filling out paperwork. That's your job. That's it.

MR. HULL: Okay. Thank you, Chris. Jack, your hand is still up, and I think you're done, and I will come back to you if you're not. James, you're up.

MR. PASKIEWICZ: I didn't mean it to be. Sorry about that.

MR. HULL: Okay. Thank you. Rusty, you're up.

MR. HUDSON: Let's think of South Carolina, and they've had a charter boat recreational for-hire reporting system in place for several years. Florida has, just last year, started this survey for the reef fish stuff for the recreational over here, private, and I'm not sure how the for-hire fits into all that.

That's just something that I've been wanting to get at, is this idea of the universe, and the idea of a paperwork, and there's a burden, and then there's a need, and, in both cases, all three sectors,

for-hire, private, and commercial, there's a need, and we have to do that to give the council members the best information to make the correct decisions for everyone's future, and, Jimmy, you and I are both in our mid-sixties now, and we're sort of the old school, and we need some folks that are coming up, the twenty and forty-year-olds, to become the sixty-year-olds later on, with the knowledge. Thank you.

MR. HULL: Thank you, Rusty. Thanks for giving out my age. Vincent, you're up.

MR. BONURA: Once again, I was going to put in there is this for a vessel or for a fishing license, and I think I already commented this in the past at a bunch of meetings, but how can you count the fishermen if you don't count the vessels first? That's all.

MR. HULL: Okay. Well, thank you. The motion has been made and seconded, and I think this isn't the first time we've made this motion and sent it to the council, and it's been ongoing. Everyone, recreational, commercial, charter, environmental, you name it, we all have recommended this, and so we're doing it again, and so I don't think we need to get into the gory details of how they would do it, because they will have to do that, and I think the recommendation, if you're okay with it, Vincent, is probably -- They know what it's going to entail to do and if it can be done, and so, James, you're up.

MR. BONURA: I was just putting it out there, that you've got to do it.

MR. HULL: Thank you, Vincent. James, you're up.

MR. PASKIEWICZ: Jimmy, thank you. I wanted to kind of comment on what Rusty's points were. Throughout the years, as far as paperwork goes, sometimes even the most diligent fisherman and fishing operations -- We go through all of our paces, and we do all of our required paperwork, with a smile on our face, and I know that, because I'm one of those people, and then you get this letter in the mail asking you to create a specific report for the information that you've already outlined in three different ways, and you ask yourself, why is it that they cannot pull this information from the reports that I have already given?

That's where the frustration occurs, and that's where the line gets crossed between the need for it and placing a burden on the fishermen, and, in years past, and probably not within ten years, but, in years past, I have sent a letter saying that the request for this information exceeds the time given that it's supposed to take, and I elect to not do this, and I have renewed my permit every year like clockwork, and I have never been questioned about it. I just wanted to put that out there.

MR. HULL: Thank you, James. Chris, you're up.

MR. KIMREY: Kind of just like he said, if we're ever going to truly tighten up the numbers of what we're consuming, and that's everybody, whether it be recreational or commercial, we need a means to track everything. Everybody knows that, and it's very obvious. On the recreational side, and I see this, because I am kind of -- I'm not going to say unique, but I'm in a spot where I see both sides. I mean, I've been on the coast of North Carolina my whole life, and I grew up immersed in commercial fishing, and most of it was nearshore or inshore. We did do some bottom fishing, mackerel fishing, back before all the permits. We did quite a bit of it, right here on the coast, and we recreational fished.

Now, I've been charter fishing full-time for almost fifteen years, and I still partake in some of the commercial fishing stuff, and I do not own a grouper snapper permit, but, until we can tighten these --

MR. HULL: We lost you, Chris.

MR. KIMREY: -- numbers up and know what's really happening, everybody knows that -- Are you there?

MR. HULL: We hear you now, Chris.

MR. KIMREY: Until the numbers are tightened -- I don't know why. I've got a perfect signal.

MR. HULL: I hear you. Do you hear me? My screen has gone back to -- I don't know if it's on my end or the whole deal, but it's gone back to --

MR. KIMREY: Is there somebody else that can hear me?

DR. SCHMIDTKE: We can hear you. For your screen, it may be -- There may be a delay. Give it a second, but there's nothing being shown, other than the raised hands, at this point. I can let you know the raised hands, if you can't see it.

MR. HULL: It's come back now. There was some delay going on, because he was in and out, and so maybe we're all back straight now. Let's go back to Chris. Are you there?

MR. KIMREY: I am, and I can hear you loud and clear, and others as well, Jimmy.

MR. HULL: Start over.

MR. KIMREY: Okay. The gentleman that spoke before me, he was hitting on some of the stuff that I wanted to talk about, but it's all about accountability, and, until we figure out what we're consuming as a people, there's no way we can effectively, 100 percent, manage this stuff, and I think that, even though this motion has been made many times in the past, that we need to keep making it until something happens, because, like I was explaining when we were breaking up, I'm kind of in a situation where I see both sides. I grew up commercial fishing, and I've been charter fishing full-time for nearly fifteen years, and I still do a little commercial fishing.

Locally, I'm immersed in intel from both sides, and so I am seeing what's happening on the commercial side, and I'm seeing what's happening on the recreational side. There are so many recreational anglers that are ill-informed, and I know it's a constant battle, and everybody knows, but they just -- They hear little tidbits of information, but they don't really understand what is happening with the fishery. They just think, because they went grouper fishing one day last summer and caught tons of gag groupers, that that automatically means that there's tons of gag groupers.

People like Jack Cox, that know that last summer was tough for us on gag groupers, would disagree that there was tons of them available, and this federal permit, and I think it would have to be a boat

permit and not an individual permit, snapper grouper recreational permit, it would give us a means not only to track people, but to keep them better educated. If we have access to them on more of an individual level, versus what they are seeing on social media or stumble across or what their buddies tell them, it would be a means to keep them better educated, through the contact information alone that was gathered by them applying for that permit.

As far as reporting, I'm really new to the AP, and this is my second meeting, but I've been involved in some facet of fisheries management for four or five or six years, doing different studies, and I piloted the eTRIPS reporting software that was implemented in January of this year. I did that, and that started four or five years ago with Harbor Lights. I piloted that, and I tried to emphasize to them, immensely, that it's hugely important that you keep this thing as simple as possible, to gather as much data as you can, and there's nothing simple about it.

It's just not, and, when I went to MREP last year, I found out that they really don't have a lot of plans to validate the science that's being collected from eTRIPS on the recreational or the charter boat/head boat side, and so it's a huge amount of effort, and it's a huge amount of money, and it totally deflated me when they couldn't give me a timeframe that they're going to validate that science, because we spend all this time and all this money, and all the stuff, and, in my mind, I was hoping that it would help tighten the numbers up on the recreational side, because I think everybody, on this panel especially, would agree that, on the recreational side, as well as they're trying to calculate what is being consumed, I think the numbers are way off.

I think the recreational side is doing far more damage to this stuff than people realize, and I say that because of what I see in my area on a day-to-day basis, being on the water 200 days a year, and I keep my boat at one of the premier tackle shops, and so I see everybody that's coming in from the recreational side, and a lot of my good friends are on the commercial side, and so I'm getting feedback from them, and I know what they're doing, and the federal license on a boat, recreational, grouper snapper, to me, just seems like the first step.

I know you guys know this, and the motion has been made apparently many times in the past, but it sounds like something we should push. We shouldn't just make the motion and send it to the council. I mean, to me, it seems like something we should be fired up and angry over, that we can't make it happen, and maybe I'm just wrong, and I don't know, but that's how I feel about it.

As far as the reporting stuff, the commercial guys is assuming far more responsibility for the fishery, because of what he's allowed to keep, and so, yes, I think there should be more paperwork for him than the recreational guys. I don't think they should have to like it, but I think they should have to do it, and, with the recreational guy, because -- Like the insurance gentleman said, for recreational, it's not their job, and it should be streamlined, but there should still be some accountability, and, until we're getting accountability from both sides, we're just spinning our wheels.

On the commercial side, and I'm going to mention this lightly, there's a lot of super ethical commercial fishermen. There is a group of commercial fishermen that cover the whole Atlantic seaboard, because I've been exposed to them, fishing from Virginia to Florida, that are not ethical, and they're going to do anything they can to defeat the system, whether it be keep too many fish or keep undersized fish or sell fish off the trip ticket, and they're doing that, and they are consuming a whole lot of fish that could be spread out over the recreational side, and those two things, the

lack of accountability on the recreational side and the enforcement side, for both, but especially on the commercial side, that is consuming a lot more fish on the daily, are things that, to me, we should be passionate about, because that's the only way to tighten the numbers up and figure out what's really happening.

What's tough for me here, in this area, is like gag grouper, like our red groupers, and we still have good news on the amberjack, but I can promise you that there's not as many here as there used to be, no matter what the assessment says. Things like that are passionate to me, because I have seen that decline.

I'm almost fifty years old, and I've been fishing here since I was a kid, and I've seen the decline in all of it, and, until we can tighten everything up and know what's really happening, and that's going to be by putting a burden on certain areas of the stakeholders, but it just seems like it's a must-have first step to really get pointed in the right direction. If anybody has got any feedback on that, or if you want to shoot me down -- I mean, I'll take it with a grain of salt, because, obviously, I'm really new to this, but I do want to understand it. It's one of the main reasons that I got involved, is because I want to understand what's happening in the fishery in general, and that's all I've got.

MR. HULL: Chris, well said. I don't think anybody is going to disagree with most, or everything, of what you said there. I wanted to ask Mike, real quick, before we go on, how much time do we have left on the webinar?

DR. SCHMIDTKE: I mean, we're at about seven minutes, and, at least as far as this specific motion that's been put up, we've had a lot of people that have already spoken on it, and so, whenever you're ready, we can take the vote.

MR. HULL: I'm ready now. I want to clear the hands raised at this time, and we're going to have a vote on this, and, if we have any time left, we'll jump on something real quick, but we have just minutes left, guys. **The motion reads: Recommend the council consider requesting National Marine Fisheries Service to have a recreational federal fishing license for the snapper grouper fishery. Anyone opposed to this motion, raise your hand. I don't see any hands raised, and so it passes unanimously, and that will go forward to the council.**

At this time, I've got six minutes, and the only thing I could say that we could do, guys, is why don't you -- If you have other business that you would like to bring before us that we can get involved with -- Because we can't do any of this at this time, but we could get involved with it and get it maybe on the agenda, or get the thoughts rolling, is email the council staff and get the contact for the rest of the AP members and put it forward and say, hey, I didn't have enough time to bring this up, but I wanted to throw this at you, and maybe we can discuss it in the future, and that's what I would like to see, and I will get to see that list, and we can start talking about it.

There's just so much to talk about, and everything we do is very beneficial to science and management, and so I think we're coming to a close here. You guys have done a fantastic job, as usual, and staff have done a fantastic job, as usual, and we're making progress. This is a slow, slow burdensome system that we're dealing with to get things done, but, as we all know, you just keep pushing. You keep pushing, because that's how we got where are. We don't give up. We

keep going. With that, I will go back to you, Mike. Then, if you say so, then I will end this meeting.

DR. SCHMIDTKE: Nothing else from my end. Thank you to everybody for your thoughtful discussions and your comments, and we'll work to get those summarized and get those ready for Jimmy to report to the council in June.

MR. HULL: All right. Thank you, Mike. Thank you, everyone. Good luck to you all. Stay healthy and prosperous, and I hope to see you soon. The meeting is adjourned.

(Whereupon, the meeting adjourned on April 23, 2021.)

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Transcribed By  
Amanda Thomas  
June 11, 2021

## Snapper Grouper

### Attendee Report: Advisory Panel

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### Attendee Details

Attended	Last Name	First Name
Yes	BYRD	01JULIA
Yes	Bianchi	Alan
Yes	Bonura	Vincent
Yes	Brame	Richen
Yes	Brouwer	01Myra
Yes	Bubley	Walter
Yes	Carmichael	01John
Yes	Conklin	Chris
Yes	Cox	Jack
Yes	Curry	Sarah
Yes	DeVictor	Rick
Yes	Foss	Kristin
Yes	Freeman	Robert
Yes	Griner	Tim
Yes	HOWARD	LAWTON
Yes	Hadley	01John
Yes	Helies	Frank
Yes	Howington	Kathleen
Yes	Hudson	Rusty
Yes	Hull	James
Yes	Iberle	01Allie
Yes	Kellison	Todd
Yes	Kimre	Christophe
Yes	Laks	Ira
Yes	Lorenz	Robert
Yes	Mahoney	Andrew
Yes	Marhefka	00Kerry
Yes	McCawley	00-Jessica
Yes	McKinley	Randy
Yes	Mehta	Nikhil
Yes	Mershon	Wayne
Yes	Militello	Chris

Yes	Moss	david
Yes	Nelson	Paul
Yes	O'Donnell	Kelli
Yes	Paskiewicz	James
Yes	Pulver	Jeff
Yes	Rhodes	01Cameron
Yes	Sanchez	Joseph
Yes	Sebastian	Cameron
Yes	Seward	McLean
Yes	Smart	Tracey
Yes	Snyder	Dave
Yes	Spanik	Kevin
Yes	Travis	Michael
Yes	Wiegand	01Christina
Yes	collier	01chip
Yes	fish	Andrew



# Snapper Grouper Advisory Panel Meeting

## Attendee Report:

Report Generated:

04/24/2021 05:24 PM EDT

Webinar ID	Actual Start Date/Time	Duration	# Registered
916-558-227	04/22/2021 08:36 AM EDT	7 hours 56 minutes	72

## Attendee Details

Attended	Last Name	First Name
Yes	BYRD	01JULIA
Yes	Bonura	Vincent
Yes	Brame	Richen
Yes	Brouwer	01Myra
Yes	Bubley	Walter
Yes	Carmichael	01John
Yes	Chaya	01Cindy
Yes	Conklin	Chris
Yes	Cox	Jack
Yes	Curry	Sarah
Yes	DeVictor	Rick
Yes	Finch	Margaret
Yes	Foss	Kristin
Yes	Freeman	Robert
Yes	Gentry	Lauren
Yes	Glasgow	Dawn
Yes	Gomez	Richard
Yes	Griner	Tim
Yes	HOWARD	LAWTON
Yes	Hadley	01John
Yes	Helies	Frank
Yes	Howington	Kathleen
Yes	Hudson	Rusty
Yes	Hull	James
Yes	Iberle	01Allie
Yes	Iverson	01Kim
Yes	Kellison	Todd
Yes	Kimre	Christophe
Yes	Kyp	John
Yes	Laks	Ira

Yes	Lorenz	Robert
Yes	Mahoney	Andrew
Yes	Marhefka	00Kerry
Yes	McCawley	00-Jessica
Yes	McCoy	Sherylanne
Yes	McKinley	Randy
Yes	Mehta	Nikhil
Yes	Mershon	Wayne
Yes	Militello	Chris
Yes	Morales	Harry
Yes	Moss	david
Yes	Neer	Julie
Yes	Nelson	Paul
Yes	O'Donnell	Kelli
Yes	Ostroff	Jenny
Yes	Paskiewicz	James
Yes	Pugliese	01Roger
Yes	Pulver	Jeff
Yes	Rhodes	01Cameron
Yes	Sanchez	Joseph
Yes	Sebastian	Cameron
Yes	Seward	McLean
Yes	Smart	Tracey
Yes	Spanik	Kevin
Yes	Travis	Michael
Yes	Wiegand	01Christina
Yes	collier	01chip
Yes	fish	Andrew
Yes	vara	mary

# Snapper Grouper Advisory Panel Attendee Report: Meeting

Report Generated:

05/11/2021 01:00 PM EDT

Webinar ID	Actual Start Date/Time	Duration	# Registered
916-558-227	04/23/2021 08:30 AM EDT	3 hours 27 minutes	73

## Attendee Details

Attended	Last Name	First Name
Yes	BYRD	01JULIA
Yes	Bianchi	Alan
Yes	Bonura	Vincent
Yes	Brame	Richen
Yes	Brouwer	01Myra
Yes	Bubley	Walter
Yes	Carmichael	01John
Yes	Conklin	Chris
Yes	Cox	Jack
Yes	Finch	Margaret
Yes	Foss	Kristin
Yes	Freeman	Robert
Yes	Gentry	Lauren
Yes	Gomez	Richard
Yes	Griner	Tim
Yes	Hadley	01John
Yes	Helies	Frank
Yes	Howington	Kathleen
Yes	Hudson	Rusty
Yes	Hull	James
Yes	Iberle	01Allie
Yes	Iverson	01Kim
Yes	Kellison	Todd
Yes	Kimre	Christophe
Yes	Laks	Ira
Yes	Lorenz	Robert
Yes	Mahoney	Andrew
Yes	Marhefka	00Kerry
Yes	McCawley	00-Jessica
Yes	McCoy	Sherylanne

Yes	McKinley	Randy
Yes	Mehta	Nikhil
Yes	Merrifield	Jeanna
Yes	Militello	Chris
Yes	Morales	Harry
Yes	Moss	david
Yes	Neer	Julie
Yes	Paskiewicz	James
Yes	Poland	00steve
Yes	Pugliese	01Roger
Yes	Pulver	Jeff
Yes	Rhodes	01Cameron
Yes	Sanchez	Joseph
Yes	Sebastian	Cameron
Yes	Seward	McLean
Yes	Smart	Tracey
Yes	Wiegand	01Christina
Yes	collier	01chip
Yes	fish	Andrew