Something would have to happen such that the SSC could look at something to respecify an OFL that we could have implemented for 2017. Otherwise, the OFL or the overfishing level, similar to black sea bass, would just be unknown, which would be a little strange for a stock that we have assessed.

DR. BARBIERI: Yes, thank you, Gregg, great point. The Florida east coast, the Southeast U.S. south of Georgia was actually assessed jointly as part of the Gulf stock, the stock structure. What came out of the data workshop evaluation of the stock structure actually tied Florida east coast with the Gulf, and because of that this recommendation. That is an excellent point, because I forgot to mention that, Gregg; that these recommendations are for cobia northward of Florida.

MR. HARTIG: Any other questions? Seeing none; Luiz, we'll move on to Spanish.

DR. BARBIERI: The Spanish mackerel assessment, which was done as part of SEDAR 28 as well and used the same types of methodologies and some of the choices in terms of parameter estimates and all were fairly similar and consistent. Stock was also found to be not overfished nor undergoing overfishing.

Like we observed for cobia, steepness of the stock-recruitment relationship was not estimated by the assessment, so they fixed that at 0.75. In this case, there might be a little bit of a discussion of this issue; because as we go forward looking at the recruitment and its relationship with spawning stock, I know Mr. Chairman had some questions regarding this, and we are going to address those as we go through the presentation.

Like what we saw for cobia, application of the ABC Control Rule actually produced a P-star of 40 percent. You can see here the ABC projections through 2015. Like what we saw for cobia, the committee felt that having short-term projections was the best course of action here given the uncertainties in the assessment.

These projections that we have here, the table, are actually already the updated projections that we received from the Center that separates ABC in thousands of pounds for landings from the dead discards. As Chairman Hartig pointed out, the ABC for 2013 and onward actually represents a significant reduction from the current observed level of landings.

Based on the projections – and I double checked this here in our report, and I don't know why the committee recommended 2017 when we have actually projections only through 2015. My impression is that there might be a miscommunication in our request for projections, the timeline of projections. One way or the other, the committee has recommended that the assessment be updated in 2016 or '17. In this case, since we only have projections through '15, an update in '17 would be recommended.

MR. CARMICHAEL: Luiz, at the time the SSC was looking at this we didn't have the P-star projections done. We had the more deterministic projections that do carry out a longer period; so when we got the P-stars, they were only done for the three years.

DR. BARBIERI: Yes, thank you, John, for the clarification. In this case, even though our report and my presentation here is mentioning that the SSC recommends an assessment update in 2017, we should correct that for 2016 because we only have yield streams going through '15.

DR. CRABTREE: What is the OFL and how much buffer is there between the OFL and the ABC?

DR. BARBIERI: I did not include the OFL. We have projections – just like for the ABC, we have projections of yield with a P-star of 0.5, which would give you the yield stream for OFL. I don't have that here in front of me.

MR. CARMICHAEL: It's in the SSC report. There have been some updates of this that Luiz is showing. The original ones that the SSC received were landings and discard combined, but the overall yields that are estimated at the P-star levels, it is the same, which is good.

But the separation is about 500,000 pounds or about 10 percent of the OFL, which is pretty consistent with what you see. In most of these cases you don't get as much reduction in yield as you do in the exploitation rate when you start fishing below your MSY level. Back in the days when we were looking at things like F over 0.1, that was considered a plus.

DR. MacLAUCHLIN: The SSC report is included under the mackerel tag as well as Attachment 5.

DR. BARBIERI: Does that address your question, Dr. Crabtree?

DR. CRABTREE: Yes, thank you.

MR. HARTIG: It is 500,000 pounds between the OFL and the ABC; but if you looked at the stock rebuilding over time through the entire time series, and if you look at the last 12 years of landings where management has been under 7.04 million pounds and 5.69 million pounds; the average through that time series is 5.3 million pounds. The average of the catches is still about a million pounds lower than what the ABC is for a "healthy defined fishery." But there will be answers to these.

DR. CRABTREE: The average catches are higher than the ABC; that is correct.

MR. HARTIG: Yes, it is about a million pounds higher.

DR. CRABTREE: Were we overfishing during those periods?

MR. HARTIG: No.

DR. CRABTREE: Presumably we had high recruitment or how do we account for –

DR. BARBIERI: Actually, Dr. Crabtree, I do have some additional slides here that will not provide complete answers to those questions, but I think will provide some good hypothesis for us to discuss and some scenarios that might explain why we are seeing the dynamics of the stock changing substantially from what the landing series seem to indicate.

This is basically the slide that provides the bottom line of the assessment. In terms of the exploitation status, as John mentioned, this stock has been fished sustainably under the overfishing level for quite a while. Right now the latest estimate – well, let's say if we estimate here an average of the last three years, we are just slightly above half of Fmsy.

The exploitation level for this stock has been relatively low for quite a while relative to our benchmark. In terms of the biomass status – and we have here a trajectory of spawning stock over time, starting in 1950 going through 2012 or '11, actually is the time of the assessment, and you can see that since about '99 or 2000 the biomass of the stock has been progressively increased and the stock has not been in an overfished state for quite a while.

Now note here, however; that over the last couple of years there is some change in that trend that does not put the stock in any dangerous situation as far as the stock status being overfished, but shows that the dynamics of the stock seems to be changing according to normal fluctuations.

MR. CARMICHAEL: Just one little take-home message of these two figures, because it is going to play into what comes later, you have a population that has had pretty low F, and you have a big biomass; what has happened over time is a lot of that biomass has moved out into the older age classes. That is usually a good thing. It is a lot of spawning stock biomass, a cushion out there, but it is going to affect what we're seeing as our realized fields. Just keep in mind now because of what we've just seen; there is a lot of biomass that has moved out into, say, five-plus fish.

DR. BARBIERI: As John pointed out, that would be a good thing for us to have. Usually rebuilt spawning stock biomass is money in the bank basically that will be generating all the interest there that we have; but as we see going forward, there are some uncertainties here that we need to discuss.

MR. WAUGH: Just to clarify; the bottom dashed line there is the minimum stock size threshold, right, and that is what we use to measure overfished. From this, looking back the stock has never been overfished. The upper dashed line is our spawning stock biomass. Since 2000 we have been above the spawning stock biomass.

MR. CARMICHAEL: Above the spawning stock biomass at MSY.

MR. WAUGH: At MSY, yes.

MR. CARMICAEL: It is roughly our biomass target.

MR. WAUGH: Right. Okay, thank you.

DR. CRABTREE: Are we assuming, what, for selectivity; dome-shaped, flat-topped, mixture?

DR. BARBIERI: In a little bit we can get into more of those. I don't have here in my presentation of getting into the assessment details, because usually those discussions don't come up. We can pull up the actual assessment and go over the selectivities. Most of the selectivities that were used for this assessment were dome-shaped with the exception of the gillnet fisheries.

DR. CRABTREE: Some of these old fish could be moving out of the sweet spot in the selectivities?

MR. CARMICHAEL: Yes, you're kind of a spoiler, Roy, yes. In particular, I have been looking at this closely the last couple of days to understand what is going on and why the yields aren't where they would be expected given the stock status. The cast net fishery and the private recreational fishery, the recreational fishery overall, tends to select relatively young fish.

The recreational fishery is ones and twos; the cast net fisheries is threes, fours, and fives. Those together are 40 percent or more of the overall yield recently. What that means is then as this biomass moves out past age two for the recreational at 20 some percent, age five for the cast net at another 20 some percent, you've got nearly half of what your fishery components are contributing to your yield; having a big population; a big portion of biomass that is really not accessible to them.

That really plays a role in the kind of yields you realize at any particular time from the fishery. The MSY is under the idea; you know, recruitment at MSY and a good biomass, and availability across all the age classes; but in reality recruitment varies, availability of age classes varies, and that is having a big impact on the realized yields in this fishery.

DR. BARBIERI: Think about this as a compound effect where the selectivities are – actually those narrow dome-shaped selectivities are interacting with some waves of what could be considered lower recruitment. When you look here, this is the end of the year, the SEAMAP recruitment index that was used in the assessment, and you have a time series here going through 2011.

It is fairly flat in general; but if you break this down, it looks like how the model is actually interpreting this recruitment dynamics. You are going to see there is a slight uptick here and then a decrease as the model is seeing this. I am just eyeballing here what the difference in trends could be.

Those things are going to be actually interpreted by the model as we are going through a period where recruitment is not being maximized. You can think of this perhaps as the opposite of what we saw with black sea bass. While we had some good waves – and fish dynamics actually works like this where you have fluctuations in years class strengths and you have what they call episodic recruitment events for this species.

From time to time they are going to have good waves of recruitment, but there will be times when they go through lower recruitment periods, and that is going to actually translate into some of your yield. Now looking here, this is as estimated by the model; the estimated recruitment of age zero fish. Think about this as the influx, as how the model is estimating the influx of those recruits. The Rmsy here is the level that would maximize your recruitment to produce the MSY.

You can see that recruitment has been variable over time, but just fluctuating around that line there; and then over the last few years is actually below as estimated by the model, below what would be that R at MSY. The model is looking at the data and seeing what the expected recruitments will be in the next few years and making those assumptions translate into lower yields.

MR. CARMICHAEL: I want to say this is where you get when you have these narrow selectivity patterns. Some of those familiar with the Gulf are seeing some of this in the Gulf red snapper. You get some interesting things with your yield and then how it translates into things like overall OFL and equilibrium MSY.

In those periods there when you have high recruitment; that means you are going to have maybe a year or two where you have a lot of availability to different sectors of the fishery. You have a lot of availability to the recreational fishery a few years ago, and now lower availability to that fishery right now.

This is something I have to acknowledge a comment that Ben made about having very high recreational landings, peak landings at a time when the fishery was at kind of a low biomass. You see that big spike of recruitment there in the eighties, and that corresponded to a time of the peak availability of the year classes that the recreational fishery selects for them.

You had kind of low biomass, but you had a big spike at that time in the recreational landings because of what was going on with recruitment. This is the kind of thing that could have an impact when we consider ACLs and accountability measures. You might have a situation where the recreational catch could be very high possibly even over an ACL when things were applied with sort of equilibrium expectations, but really isn't resulting in overfishing.

It is just a function of the increased availability due to a year class, which may occur over a short time. I know this is a point that Roy has made quite often in dealing with recreational fisheries and how they respond to availability. We're seeing some of that now when we are seeing the impact as we looked at our projected yields in the future.

The impact of those low year classes there in the terminal point of this stock assessment is, I believe, why we're not really realizing yields at or above MSY over the next couple of years. It is because of that lower abundance moving through the availability periods of these different portions of the fishery.

MR. HARTIG: Before you leave that, I appreciate that makes perfect sense from that one question I asked about that time series, but what doesn't make a lot of sense to me is the highest landings of the time series are in the last two years. How do you explain that with recruitment being lower based on that survey; and then we have the highest landings combined – now that is recreational and commercial for that timeframe.

DR. BARBIERI: Well, it has to do with the selectivities again. Here you are talking about recruitment of age zero. You are talking about something that is coming in, but it is going to take a couple of years for them to be realized into actual yield. John said given the selectivity of the fisheries, you coincided to have some good year classes going through that point where they were being selected; the yield is expected to be higher. There is a little bit of disconnect, but the disconnect is not nonsensical. Really, it has to do with the dynamics of the stocks.

MR. CARMICHAEL: Exactly. You look at there and you look back in time, you have like five out of seven years with recruitments approaching; well, not the first, but the second, third and fourth highest years. In 2011 with the last year landings in the assessment, those ages would have been very available to the commercial fishery components. Those ages would be working

just past the cast net fishery components over the last few years. I think some of the peak landings you are seeing in the recent history are because of that good recruitment that was occurring.

MR. HARTIG: Well, to corroborate that, the year that we don't have the landings numbers for was this past season and landings did go down, so it is matching this pretty well.

MR. WAUGH: Did the SSC discuss – I know you didn't have a lot of the projection results, you had some of them. But to me it seems like what we're seeing here is an artifact of our sampling that is reflected in the selectivity. We're missing a portion of the stock, the larger fish, older fish that presumably are out there. We're not sampling them so how are they being account for; and is this ABC more an indication of what the fishery can produce and not of the population?

MR. CARMICHAEL: It is not a matter of sampling or anything. It is a matter of what the fishery is able to capture. It is not saying the fish are not there. The fish are in the population. The model thinks the fish are in the population, and that is why we get a biomass which is well above the minimum stock size threshold. But due to the selectivity patterns, a lot of the fish are not available and are not being captured by the fishery. They are there but they are not vulnerable to the gears and the way the fishery operates, so they don't get to contribute to the yield.

DR. BARBIERI: That is the key difference between what we consider biomass of the stock and the biomass of the spawning stock versus the biomass that is actually vulnerable to the gear, which is defined by the selectivity pattern in this case. Because the fishery concentrates on those younger age classes, having all those older fish out there is a plus and it should help with the resilience of the population; it should increase the probability that future recruitments are going to be higher, but it doesn't really in the short term help you with the yield as is going to be realized in the fishery.

DR. JOLLEY: Okay, so if we've got a group of older, bigger fish; do we have any idea of where those bigger, older fish are? Are you seeing them, Ben, in some places? Are they seeing them up the line off Carolina and Virginia?

MR. HARTIG: The hook-and-line fishery targets the biggest animals. They are a lot harder to catch. We have to go through herculean efforts to catch them. We have to have live chum and fish with specific gear in order to catch those fish, but we catch some of them. But the hook-and-line fishery is one of the lower components of the landings, so you don't get a full accredited through this process. But the other thing is that there is another group of Spanish, John, that acts like king mackerel. They move down in the deeper waters. They are separated entirely from the migrating stock.

This mixed group that we fish on; these fish are 6 to 12 pound average fish. I don't know where they go. We see them maybe once or twice every three years, four years maybe, but then they move on. I don't know if they go to Miami and stay down there or what, or go to the Keys, but we do get to see them and they are in 110 feet of water. They stay in the same areas the king mackerel do, but we don't catch many of them.

MR. JOLLEY: There ought to be some tag return evidence from previous tagging programs on those bigger fish.

MR. HARTIG: I don't know that we have much tagging in Spanish at all to inform us on that.

DR. BARBIERI: Continuing here, you can see again – and I am eyeballing this and this is just to show you some trends that overall the recruitment had been increasing. Over the last several years the tendency, the trends of those actually translate into lower recruitment, which brings us to the key question that Mr. Chairman sent me, right?

How can recruitment be declining in recent years when the last two years of the total landings are the highest in the recent time series even with the decline in recreational effort? Basically it is what we've been discussing a lot. You know we have a high biomass out there. It is above MSY, it is definitely above MSST, and we have a good age composition that should keep this population in a resilient state as far as future recruitments.

What we cannot account for is the fact that due to natural causes, populations do change, do vary over time, so there would be some periods of lower recruitments. There is no indication that this is going to be a continuing trend. There is no indication that this is bad news propagating into the future, but for the recent future that seems to be the case.

As you can see, we have some additional hypothesis also that could be explaining, and those are documented in the assessment report. There is a lack of a strong relationship between the spawning stock and the subsequent recruitment. Even though the assessment analytical team had fixed that steepness at 0.75, you can see here that the relationship is not very strong. We have the highest recruitment in the series associated with the lowest stock biomass.

That itself would say that even though having a large biomass of females out there, having a full age composition is a good thing; it will not guarantee that your recruitments in the short term are going to be maximized. Then another point that I thought was interesting in the assessment is that there is a suggestion of density dependence in the egg production and the recruitment of Spanish.

If you see at the number of recruits per spawner and you find this inverse relationship here that suggests the recruitment actually is somewhat being decreased as you reach these levels of high spawning stock biomass, so there is a population regulation process that might be taking place. We don't know this for sure, but it is a viable hypothesis to explain why. Now that we have this stock at its fully rebuild stage, we have the age classes out there, there will be a little bit of that carrying capacity effect going on and the stock might be self-regulating its abundance through lower recruitments.

MR. HARTIG: Before I get to John; that has answered one of the pressing questions I have had about this stock, because the observations I had – I got back into fishing in about '93. There was tremendous numbers of small fish with a low population size of Spanish. As this stock continued to rebuild, recruitment actually declined from those very large abundances that we saw, and the bait mackerel were harder and harder to catch, which doesn't make a lot of sense to most fishermen saying, hey, we got so many more fish; why isn't recruitment up there?

But that explains exactly what I have observed since the early nineties is that inverse relationship there, so that is pretty cool. We've explained a heck of a lot of questions that I have had about this stock today. All the fishery observations that I have mesh with what you all have tried to put forward. I'll have another question at the end. John.

MR. JOLLEY: We haven't seen any evidence of senescence in the older mackerels, have we? I don't think it occurs commonly in most fishes, but we aren't seeing any of that in the biology of the fish, are we?

DR. BARBIERI: Not with the mackerels. Senescence has been fairly well documented with some of the tunas. There are some other species that are being looked at in terms of increased natural mortality due to senescence in lower reproductive capacity; but in terms of mackerels, I haven't seen anything that suggests senescence to be an issue.

DR. CRABTREE: I think when Alzheimer's sets in on fish, they get eaten real quick. The recruitment phenomenon you are talking about sounds like it would be more consistent with a Ricker stock recruitment relation rather than Beverton-Holt, right? Did you look at that? It seems like that could substantially change the reference points.

DR. BARBIERI: Actually, Dr. Crabtree, good point. I was delighting myself over this assessment document last night, and that thought definitely came up that we should investigate – I mean we have not for a lot of species at least in our region here really been able to see this density dependence that would suggest that a Ricker function for the stock recruitment relationship might be better than Beverton-Holt.

But this is something that definitely we are going to be recommending the assessment team next time around look into, because this evidence of density dependence seems to be fairly strong. I mean their relationship is stronger than a whole lot of the other ones I have seen before.

DR. CRABTREE: I would think that would have a substantial impact on the reference points and Fmsy potentially.

MR. HARTIG: Well, to that point, they ran the Ricker as the review asked for it, and I don't know how far they got or I can't remember if there were problems with that, but I am pretty sure they did, and I don't think there were substantial differences. It looks to me like there should be.

DR. BARBIERI: I just wanted to add Dr. Crabtree that one of the CIE reviewers actually brought this up as well, looking at this density dependence here, indication that we explore the Ricker. Since this didn't come up until the actual review process, it was too late to kind of redo the whole thing, but it is something that we are going to be exploring for next time.

MR. HARTIG: That helps me; that is interesting. My question then comes to be looking at mackerel, short-lived mackerels, most of the fishery takes place on younger ages; are we at the appropriate benchmark to actually be setting our ABCs? Should we be setting our ABCs closer to MSY based on what we're seeing from these population outputs?

MR. CARMICHAEL: I think it definitely raises a lot of questions about the tool and the difference in MSY and what the P-star projection analysis give you. MSY gives you what could

be realized if you had recruitment at that Rmsy and you have availability to all the different fisheries, and they can take them out based on their selectivity, and then the P-star is really giving us what you can expect to take right now.

I think the risk would come in when you get that really good year class. If the OFL/ABCs are set down lower and you get that really good year class – there could be one coming along right now and we wouldn't know it – you could have a situation where suddenly the recreational fishery goes way high like it has whenever there has been good year classes.

You might say, oh. Man, we're over our ACL, but in reality it is the abundance. I think that is sort of where the risk lies in using that P-star tool, which is saying, okay, recruitment has been kind of down; that is going to keep on; it doesn't know when the next good year class, 25 percent above recruits at MSY will happen; it is going to tend to put abundance and recruitment right about the MSY level. If you look at the recruits in the projection tables, you see that.

You see them come out of the 25 million fish, whatever, around the MSY. The model is not really going to give you those really good ones. I think that is where the risk lies, because you could have quite a bit more yield available to that fishery. You could have those landings come in and not result in a high F, which is ultimately what we're trying to do is present the F.

We use the OFL and the poundage and stuff as a metric between assessments. I think that is where maybe this one requires maybe a little different approach than what just our basic rule of thumb is and run the P-starts at 50 and 40. Maybe we should consider how we might deal with a spike in recruitment, which leads to some higher landings, and if we can work that into our system in some way.

DR. BARBIERI: Right; and to just add to what John pointed out, yes, looking at a different stock-recruitment function will influence or should influence those benchmark estimates. That would change the scenario of that equilibrium MSY that is being estimated and that we are using.

You might be able to do something that allows you to actually harvest higher levels for this, and we're going to be looking at that for the next assessment. But one thing is given all of this, it is advantageous that we have a shorter time series of projections that the committee felt that since we have all these uncertainties about future recruitment, that going with just a three-year projection would be the best way, and we reevaluate this and we address it in more detail after this next update.

MR. HARTIG: It is just the problems I have, when you get that year class; you were talking in terms of the recreational fishery, but the commercial fishery as well – and the cast net fishery in particular, which utilizes those young ages, that yield is going to be foregone on those years of high recruitment for several year periods.

You are going to be foregoing a substantial amount of yield from a year class and it is eventually going to go off into the older ages. Because of selectivities you will be losing it, well, to future recruitment, but the fishery is not going to be able to get much of it. The hook-and-line fishery does get some of it.

DR. BARBIERI: This is where the benchmark estimate changes. It will give you a different scenario.

MR. CARMICHAEL: One way to look at these projections, too, Ben, is to consider that maybe if the council took no regulatory changes; what this is saying is you might see a reduction in yield in the next couple years as opposed to the couple years just prior simply because of the changes in abundance across the age classes. You may not have to do anything regulations wise, no changes whatsoever and this could come to bear; and you'll see the next increase when we get a good class, and it will just show up in the fishery.

MR. HARTIG: Yes, it is just we know we get good year classes. Like you say, there could be one in the pipeline now and next year we could be in the situation where based on the regulatory way it is set up now, you could have substantial shortened – the season could be half as long, easily. Easily the commercial fishery could lose half its production.

DR. CRABTREE: Didn't you have a SEAMAP; I think it was recruitment index? Does it do a good job of predicting year class strength?

DR. BARBIERI: Not really. It helps. This assessment is less uncertain that the previous one for which we couldn't even really determine the biomass stock status. The review panel thought the last time around that the lack of a recruitment time series was compromising those benchmark estimates. This informs recruitment somewhat, but it is a little bit noisy.

I'm saying this going through the CIE report, the reviewers' reports and their comments. They looked into this into more detail I guess than anybody. They felt that having some additional recruitment index would be favorable and improved one. Considering the selectivity pattern of the fishery, too, you don't get a whole lot of older ages into the fishery that are being sampled in a way that you can actually help use the age comps to guide your recruitment time series, not efficiently as it could be.

MR. HARTIG: Okay, what you have shown to me is that it is going to be critical to do another Spanish mackerel stock assessment at the end of this time series, at the end of the three years projections; and that in order to use the Ricker approach what type of assessment would we need to be able to do that?

MR. CARMICHAEL: We can use the same assessment; you don't need to change. Well, it is just a matter of stock-recruitment parameters. I think one thing to think of is if there is some way that with the recreational fishery getting the fish at a relatively young age, if there is some way to factor maybe an increase in recreational catch into looking at the population and trying to decide if there is actually a year class going on at that time which might affect how you guys respond to that in terms of accountability measures.

It could be very helpful. When I looked at this, one thing I noticed is you see the terminal year there, it is being pulled down by that low SEAMAP, but we see in the past that a lot of SEAMAP CPUEs that are that low didn't really translate into year classes that bore in the fisheries. That is ages that aren't really recruited. The terminal year being 2011; those are age zero fish.

They are just slightly recruited to a couple of gears. I am kind of optimistic I guess in some ways looking at it thinking that maybe that terminal drop in recruitment that we see isn't going to be as severe, because it just doesn't seem like it has been in the past. Then again it could be, and that is why you see what you see in the P-star projections, because they consider what if it is and what if it isn't.

I think trying to work this into accountability measures would be helpful for the next couple years and doing an assessment as we're going to need to do in time to respond to the three-year projection window we have now certainly should be in our plans and looking at the Ricker should be part of that.

MR. HARTIG: Are there any other questions? I found this fascinating from my perspective; I really did. I mean, talking the questions out and the observations of what I have seen over the years, we actually are almost spot-on to the way that the analysts answered the questions, which was great. I sincerely appreciate that.

The only problem I have is that if we know that using the Ricker is going to probably change the outputs, why aren't we doing that sooner? Maybe that is just me. Foregone recreational and foregone commercial harvest based on something like that; I know these assessment schedules are getting pushed around and things of that nature, and it may just be a fact of life that is how that fits into that three-year average and we see how the fishery goes.

We know landings were lower this year in particular, so it is matching that exactly right. Maybe we just let it go, but I certainly would like to put this on the schedule as soon as we can. I think that this is a pretty good case. We've got one assessment parameter in particular that we are going to change that will probably make a difference in the assessment.

I'm sorry that I pulled you from your luncheon schedule to go through that, but to me it was fascinating, and I hope some of you all also thought so, too. To me it was really a great explanation of why we are having lower catch limits in the current fishing years so thank you. When are we coming back, Mr. Chairman? What time is it?

MR. CUPKA: It is 12:30; so normally it would be 2:00 o'clock.

MR. HARTIG: Okay, thank you, 2:00 o'clock.

The Mackerel Committee of the South Atlantic Fishery Management Council reconvened in the Plantation Room of the Hutchinson Island Marriott, Wednesday afternoon, June 12, 2013, and was called to order at 2:00 o'clock p.m. by Chairman Ben Hartig.

MR. HARTIG: All right, it looks like everybody is here and raring to go. I think we will reconvene the Mackerel Committee. Thank you for being back here on a timely fashion; I appreciate that. What I would like to do right now is after that discussion we've had – and I did a poor job trying to encapsulate what I wanted to see out of this coming forward – I think Michelle has got a motion to make for the committee to consider.

DR. DUVAL: Just given all the discussion that went forward, I think trying to act on the SSC's advice for an ABC recommendation right now might be a little bit premature just given the

conversation that we had around the table earlier today, and so I would like to – difficulties; hone on.

DR. MacLAUCHLIN: Okay, we just need like five minutes to restart this computer.

MR. HARTIG: I'm looking at if we can do something else without the computer; I'm not quite so sure. Is there any other business to come before the committee? All right, we're back online. Michelle.

DR. DUVAL: As I was saying, based on the conversation that was had around the table earlier today, it seems that it might be a little bit premature to move forward with any modifications to ABCs and ACLs based on the current Spanish mackerel assessment just due to some of the revelations that we had earlier.

My motion is to request that the SSC review the Spanish mackerel projections and revisit recommendations for OFL and ABC. The SSC is asked to consider basing OFL and ABC on equilibrium projections of MSY in light of the effects of selectivity and recruitment patterns on short-term yield estimates.

MR. HARTIG: We've got a motion on the board; second by Anna. Discussion? Is there any objection to this motion? Seeing none; **that motion is approved.**

DR. BARBIERI: I don't have any concerns at all. I think this is a good thing. The SSC came up with a recommendation that was based on the information that we had at the time. After our discussion, we have a reassessment of work to go. I just think that it would be helpful to the committee to have a little more explicit statement from the council regarding the direction they would like to go.

I think the committee will have some concerns about the risk factor that might come into this decision. I think I would have to think a little bit and discuss with John Carmichael later how we could phrase this, but perhaps Michelle as our SSC Council Liaison could come prepared at the October meeting to address those issues if we don't go explicitly here right now. I know that the committee will have questions, and we will want to stay within our side of the fence and not step too much into that risk factor that we deferred to the council. I just wanted to make that note.

MR. HARTIG: I appreciate that. Sometime between now and full council we could probably come up with the wording that you're looking for and have that; but as far as that motion is phrased now, would that prohibit that with the additional wording later or not?

DR. BARBIERI: No, I think the motion is very well phrased, and I think that it is clear enough to the SSC what the intent is. I just think that it would benefit the committee to have a little more background and to have an explicit council statement that would go a little more in detail on that risk factor.

The fact that the council perhaps is trying to say here that it can afford to be a little more risk prone or a little less precautionary in setting catch levels given the stock status, that the stock is way above both MSST and biomass at MSY, that having those catch level recommendations

based on the long-term equilibrium yield is not seen as any unwarranted risk, perhaps; something of that nature.

MR. CARMICHAEL: Yes, I think that is very good, and I think having the council have some discussion of it to give some guidance that goes along with the motion is a good way to handle it. It lets the motion be pretty clear but concise that you want some reconsideration and we can add more details.

The other risk factor I think the council is directed to have some role in is the separation between OFL and ABC, and some guidance here would be very helpful as to what type of buffer should be applied in this circumstance, because we don't really have maybe a lot to go on in that case. We could look at the separation in the P-star runs in yield that you get between 50 percent and 40 percent maybe as a starting place. There may be other ideas that we could look into for that; but I think some sense of your risk tolerance will really help the SSC.

MR. HARTIG: Okay, this is something I think we need to have some conversation on before we discuss it. For me, it would be helpful to sit down with John and see exactly what we are looking at. I would be comfortable with John coming up with a risk tolerance evaluation for this stock in particular based on the new parameters that we are going to be coming up with and how the council could factor that into their decision-making.

I don't' think we're ready to discuss that right now; I don't think we are. I may be wrong, but I'm not. We had a motion on the floor which is passed. Between now and either Full Council or in directions to staff to try and develop something on risk tolerance, hopefully by the time we get to Full Council we will have this flushed out more and then we can bring this back.

Then I could actually talk to the committee about how this would address differently what the risk tolerances are that we have now. Yes, I think that would be good. We've got a motion that is passed with some continuing discussion with staff to bring back at Full Council our risk tolerance evaluation for Spanish, so that would be good. All right, that takes us to cobia and the numbers, the ABCs – how do we do this anymore? Do we just accept the SSC's recommendation for setting ABC and that goes right to staff and the numbers are calculated?

DR. MacLAUCHLIN: Well, with cobia it is a little different, because it is actually an action in Amendment 20 because the boundary moved. You also will have to discuss the Florida east coast allocation of the Gulf cobia ABC. We can wait to talk about that when we get to Amendment 20 if you like.

MR. HARTIG: That would be great. Next on our agenda is the Mackerel Advisory Panel Report; Attachments 5A and 5B.

DR. MacLAUCHLIN: The Mackerel AP met in April, and there is an AP report and then also the minutes in there. I have their specific recommendations for each action in the three amendments that they reviewed in the decision document. I'm not going to go through all of this right now, but I just wanted to let you know that they were there. Then also there were 11 AP members in attendance and then 5 not in attendance.