SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SNAPPER GROUPER COMMITTEE

Hilton Wilmington Riverside Hotel
Wilmington, NC

December 3-5, 2013

SUMMARY MINUTES

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Dr. George Sedberry
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Dr. Luiz Barbieri
Chip Collier
Dir. Bruce Buckson
Dr. Louis Daniel

Additional Observers Attached

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The Snapper Grouper Committee of the South Atlantic Fishery Management Council convened in the Cape Fear Ballroom of the Hilton Wilmington Riverside Hotel, Wilmington, North Carolina, Tuesday afternoon, December 3, 2013, and was called to order at 3:30 o'clock p.m. by Chairman Michelle Duval.

DR. DUVAL: I would like to go ahead and call the Snapper Grouper Committee Meeting to order. What I would like to get through at least for the rest of this afternoon is the presentations that are on the agenda for an update of the research that has been conducted in the Oculina Experimental Closed Area and at least get through those presentations today.

The first thing is approval of the agenda. Are there any known modifications to the agenda? Seeing none; the agenda stands approved. The next item is approval of our September 2013 minutes. Are there any changes or modifications to the minutes? Seeing none; the minutes stand approved. The next item on our agenda is the status of commercial catches versus quotas; and I believe Dr. McGovern is going to take us through that.

DR. McGOVERN: The commercial landings are found in Tab 7, Attachment 1A, but those have landings through November 11; so what is presented here are updated landings that we got from the science center last week. This table presents the 2013 landings through November 26 – you can see that in the heading – as well as the landings for the same time in 2012.

It also shows the 2012 ACL and the 2013 ACL. We have a lot of ACLs that have been updated through Regulatory 13, 15, 18 and 19. I'll touch on some of these species. Black grouper; we're currently at 49 percent of the ACL. Unlike last year, black grouper does not close when the gag quota is met; so black grouper has remained open even though the gag quota has been met.

Blue runner; that closed on the 14th of November. We have exceeded that ACL by about 5 percent. Last year that closed on the 10th of December. The Deepwater Complex, which mainly consists of blueline tilefish, 71 percent of that ACL has been met this year. Last year we met the ACL and closed it in September.

Looking at gag, we're about 99 percent of the gag ACL, and it closed on November 13th. Last year it also closed in October and we reopened it in November for a little bit. You see with most of these species, their current landings are pretty similar to where they were last year. For gray triggerfish; that was closed on July 7th; and then we reopened it for a couple of weeks in November. From what I've heard from folks, the weather was good and the catches were pretty good and we wound up going over that by about 9 percent. Last year for gray triggerfish we exceeded the ACL by about 2 percent.

Looking at red grouper; that has remained open. Scamp and shallow water grouper; they have all remained open despite the gag quota being met. Red porgy closed yesterday, and we're about 90 percent of that ACL. Snowy grouper closed in August. We exceeded that ACL by about 3 percent. Last year for snowy grouper, we exceeded it by about 7 percent, but we didn't close it.

Yellowtail snapper; we're at about 80 percent of that ACL. We met 89 percent of the ACL last year. We go down to black sea bass; this now has the increased ACL of 780,000 pounds. We're

at about 51 percent of the ACL; and we're currently in the November through April seasonal pot closure for this species. We exceeded the old ACL last year by abou5 percent.

Greater amberjack; we're at 62 percent of that ACL; and we met about 94 percent last year. Again, the landings are very similar this year to last year. For vermilion snapper, the ACLs were increased in September for this species from about 350,000 for the January through June period to 466,480 pounds.

Because vermilion snapper allows for a rollover of any unused quota from the first season to the second season, that meant that the season – what was used from this first season was added on to the second season quota of 446,480; so the new quota for the second season is about 613,000. We have a trip limit in place now; and that is reduced to 500 pounds when 75 percent is met.

The trip limit was reduced in October and we closed vermilion snapper yesterday. Currently we're at about 93 percent based on landings through November 26th. That will probably go up a little bit. If the weather had been good the last couple of weeks, I expect we would have come close to meeting that. That is it and I'll take any questions you might have.

DR. DUVAL: I thought vermilion closed last week and not yesterday?

DR. McGOVERN: It closed on Monday. Vermilion closed the 2nd of December. The Fishery Bulletin went out on Wednesday last week and that's when everybody was informed of the closure.

DR. DUVAL: Are there any questions for Jack about the commercial landings? Ben.

MR. HARTIG: I don't necessarily think it's a question that Jack can answer; but I do want to make this point. In gag we have a post-quota bycatch mortality that we take out, correct? And that is a forecast made at the beginning of the season based on landings from the – no, okay, what is it based on?

DR. McGOVERN: That was done from the assessment. The quota was changed from the assessment and it didn't include the new management measures, so the SSC at the time wanted us to account for increased bycatch that would come about with the new management measures. We did that and we adjusted the quota based on the expected bycatch. Like vermilion snapper, the old assessment also had post-quota bycatch mortality; but with the new assessment they took into account the discards that would take place; and so we didn't need that based on the new assessment.

MR. HARTIG: Well, my line of thinking was that if it was based on some kind of closure date, that you could go back and parse some of that out, but obviously it is not. It's a totally different thing and I appreciate that.

DR. DUVAL: Are there any other questions on commercial catches? If not, I believe Mike Larkin is going to give us the update for recreational catches.

DR. LARKIN: This is the snapper grouper as well as the dolphin and wahoo landings. These landings are both MRFSS and MRIP. It really depends on how the ACL is defined. Regulatory Amendment 13 changed a lot of the MRFSS ACLs and converted them over to MRIP, but there is still is a big chunk of them in the South Atlantic that are still regulated under MRFSS, so keep that in mind.

These landings for 2013 we have Waves 1 through 4; so that is from January through August of 2013. That is what I have for the most recent landings. When necessary, they're post-stratified. That means for stocks like gag and greater amberjack the recreational landings from the Keys, from Monroe County, were added to the South Atlantic.

These landings do not include headboat except for the black sea bass. They have headboat landings going from January to September of 2013 for current landings. They also show you some historical landings and those do include headboat for all the stocks. What I'm first showing you here is the 2012 landings and ACLs from Atlantic spadefish all the way down to jacks.

Then you can see last year golden tilefish exceeded their ACL by about 20 percent. Gray triggerfish exceeded it by 4 percent and hogfish exceeded it by 5 percent. In the case of golden tilefish, that was actually closed in June of last year. Gray triggerfish and hogfish; their accountability measures was kicked in, so therefore the next year we'll keep close monitoring on it; and if we think they're going to exceed their ACL or if they do exceed their ACL the following year, then we will close them.

So now I move on to 2013; and as you can see, I've got the blue cells here to help you track as we go from 2012 to 2013. For golden tilefish, that one was predicted to exceed the ACL or come close to it and we closed that in June. Again, we did it this year as well as last year. Gray triggerfish, we're currently at 53 percent. Hogfish we're keeping a close eye on because that one is up to 83 percent as of right now.

Now to move on to other grouper stocks; here it is for mutton snapper going down to yellowtail snapper. The porgies exceeded their ACL in 2012 by about 12 percent; snowy grouper by 295 percent; and wahoo, 9 percent. That was in 2012. Moving on to the current landings we have now; so now porgies is at 57 percent of the ACL. Snowy grouper again exceeded their ACL and they were closed in May. Wahoo is only at 18 percent right now.

Now I'll move on to these two stocks that don't have the January to December calendar year. Instead they have a fishing year for greater amberjack, May through April; black sea bass, June through May. Greater amberjack for the 2012/2013 season; they exceeded their ACL by 25 percent; and black sea bass by 5 percent. Black sea bass was closed September 4, 2012. Now to move on to the current landings we have for these two stocks; greater amberjack is about 35 percent.

Black sea bass has landed 26 percent. Well, one, the stock is no longer overfished; so the ACL was greatly increased. We're no longer monitoring it with gutted weight. Now we're

monitoring it with whole weight, so that is anther about 18 percent increase. If you include that, that will increase the landings by about 18 percent going from gutted weight to whole weight.

Now what I'm going to do is provide you with tables if you want to get the historical landings for these stocks. This is black sea bass going from 2004 to 2005 all the way down to 2013/14 and broken out by the charter, headboat, private and shore. Also, the full red mark there you can see at 2013 now we're monitoring of whole weight.

The landings previous before that were gutted weight; but now we're using whole weight, so something else to keep in mind when you look at the landings. Then there is a figure to really help you visualize how the landings have changed over time. I'm going to show you several stocks with the same figure; so the format you can see along the X-axis there are years.

You can see in this case from 2004/2005 all the way to 2013/2014. As well as underneath that is the legend and you can see the colors breakout for those bars, whether it is charter, headboat, private or shore. Then over on the X-axis to the left is the landings; and over to the X-axis – I'm sorry, the Y-axis to the left is the landings; the Y-axis to the right is essentially the effort.

We have the MRFSS effort in terms of number of trips. That is actually the red. Then the orange is the number of trips in headboat. It is kind of confusing. I have in the legend MRIP; and up in the upper Y-axis I have MRFSS. I should have corrected that; but really historically the effort was measured with MRFSS; but now in 2013 the survey has changed and now the effort is actually measured in MRIP; so something else to keep in mind.

I also need to point out those dots are the ACLs. You can see in 2013/2014 the dot is really high up there. You can see how the ACL has greatly increased as well as we're also measuring – or I guess monitoring it in whole weight. We will go on to gag from 2004 all the way down to 2013. Currently the landings we have are 58,000. I guess I'll try not to go through these too fast if you guys want to look at the landings each year.

If you get to visualize it there, the landings have changed through time. You can see that currently 2011 and 2013 below the ACL, below the dots there. Then I'll move to greater amberjack from 2004/2005 all the way 2013/2014. Currently we have about 410,000 landings for the current fishing season, current fishing year.

Then you can see in this case the 2012/2013 how they exceeded the ACL, but currently looking at the 2013/2014 it is below the ACL. Then mutton snapper from 2004 to 2013, currently we have about 359,000. As you see a lot of these tables, you will see the headboat is actually blank because the headboat data for these stocks are not available. We had only that – for 2013 for the black sea bass. I'm kind of taking my time so you guys can look at them here. You can see for mutton snapper, currently 2012/2013 below the ACL.

Then for yellowtail snapper, 2004 to 2013, 557,000 is the current landings we have for them. Then you visualize it here. Again, each of the landings in this case are below the ACL. Moving on to red porgy, 2004 to 2013 it looks like we've got 33,000 pounds currently reported for them.

And then again you can see the last three years the landings compared to the ACL and below the ACL for the recreational landings for red porgy.

Then vermilion, 2004 to 2013, about 61,000 pounds so far; and then vermilion, again you can see the landings have been below the ACL the last two years and this year currently from what we have so far. Snowy grouper; this one I show changes from pounds to numbers of fish; so you see the change throughout time and then in 2013 we're about 860 fish. Then you can see there in 2012 how it exceeded the ACL; and in 2013 it also exceeded the ACL; and it's currently closed right now.

Golden tilefish; this one is also in numbers instead of pounds. Currently we're looking at 2,936 fish, which is about 97 percent of the ACL being seen in 2012 and in 2013. It actually exceeded in 2012 and is very close against it in 2013. I only have dolphin and wahoo left, so hang in there. In 2004 to 2013, currently we have about 4 million pounds, 4.4 million pounds reported.

You can the last two years their landings have been below the ACL. And then wahoo from 2004 to 2013, 257,000 pounds; and they exceeded their ACL in 2012, as I pointed out earlier, but currently the landings have been low for 2013. It looks like 18 percent of the ACL is what we have so far. That's it. Are there any questions?

DR. DUVAL: I have one question about snowy grouper. We had a significant overage of the ACL for the recreational fishery in 2012, 395 percent, and over again in 2013. The accountability measure is to monitor the landings the following year for persistence and increase overage; but given the pretty significant overages that we have had, is the plan to still reopen snowy grouper recreationally on January 1st?

DR. LARKIN: Well, that one, if I understand correctly – and hopefully Jack or someone else can correct me, but that one I believe we take the three-year average of the landings for the three years. You're right, there were very large landings in 2012; but I believe, yes, it is on track to open up on January 1st, unless I'm mistaken. The landings are so high that you really brought that average up that made the average over those last three years above the – the landings in 2010/2012 were so much higher, they brought that average above the ACL; hence, the closure in 2013.

DR. CRABTREE: Mike, the CVs on the snowy grouper landings are very large, I assume.

DR. LARKIN: Yes, I agree with you.

DR. CRABTREE: So, when you say it's a significant overage, it may in fact not be – it may be within the confidence intervals for all I know because they're awfully large.

DR. DUVAL: And that was going to be my question for 2013 is what those CVs were. I would assume that they would be pretty large.

DR. LARKIN: Because it is low, I guess infrequently caught. That's a great point.

MR. BELL: Just to make sure I understood this; so when you say here is where we are now, that's actually at the end of August, right?

DR. LARKIN: Correct.

MR. BELL: Unlike the commercial landings; we don't make any kind of a swag or estimate as to where we might really be; so with like black sea bass, we're above 26 or whatever percent it was?

DR. LARKIN: Yes, you're right, that is where it was. Well, black sea bass had the headboat going up to the end of September, but, you're right, I guess must be the MRIP going up to the end of August, so that is where we were for those two; headboat and MRFSS; headboat and MRIP.

MR. BELL: And the reason I ask is I get a lot of questions, as I'm sure you all do, too, about when is it going to close, when is it going to close, how long are we going to be able to go, and you can't really say. We're always looking back in time with this three months or so; but that is obviously something folks are interested in from the standpoint of planning. Maybe we'll actually make it through the whole year.

DR. LARKIN: Well, the ACL is significantly larger this year; but, yes, I can't really comment on whether it is going to close for the season or not.

MR. HAYMANS: That was the direction of my comment was, one, I think we are approaching the estimated dates in our last amendment when we thought it would close so we're doing quite well, I think. What I was really going to ask is do we have a comparison for last year where we were at this time; at the end of August? I mean is there a similar comparison?

DR. LARKIN: You mean just through waves one through four?

MR. HAYMANS: Right.

DR. LARKIN: I don't have that available, though, but I could dig it up. I just provided the landings for the whole year of 2012 and not just up until Wave 4.

MR. HAYMANS: I'm excited to see we're into December and we're still fishing.

DR. LARKIN: Are you talking about one specific stock or just all of them?

MR. HAYMANS: Black sea bass; I mean that's where the interest seems to be.

DR. LARKIN: That would be on website up to Wave 4 now. Yes, I'm sorry, I'm flaking out; if you go to our website, because we do have the recreational landings by wave there. If you go to our website, you could see where it was in 2012 from Wave 1 through 4.

MS. BECKWITH: Just to Mel's point earlier, in terms of planning for black sea bass, we are moving towards stating the beginning and the end date here shortly as a council, so I'm looking forward to that.

DR. DUVAL: Are there other questions or comments for Mike about recreational landings?

MR. CONKLIN: I just had a question about the – do the guts really weigh 18 percent of a black sea bass? I thought that was a little bogus, but I could be wrong.

DR. LARKIN: I don't mean to put the ball in Bonnie's court here, but that's what we got from – from my understanding we get this conversion rates from the science center. I believe 1.18 was the conversion for black sea bass. I don't know where the official – my understanding is that our, I guess, declared conversion rate for that.

MR. CONKLIN: I could see that if they swallow your bait, but otherwise maybe that –

DR. LARKIN: You think it is much lower is what you're suggesting?

MR. CONKLIN: Well, yes, unless they swallow your bait.

DR. DUVAL: To that point, Bonnie?

DR. PONWITH: Yes, exactly to that point. I've done comparisons of whole versus gutted weight. You have to sample a lot; and the reason is because those numbers can be profoundly different. It is not only what is in the stomach; but you'll remember the gonads are part of the guts as well. When they're in a reproductive state, it can be a huge percentage of the body weight. Yes, it is a number that fluctuates; and that is why it is important that we do that biological sampling to understand those conversions.

DR. DUVAL: And there are some updated conversion studies. I know that North Carolina had received an ACCSP grant a couple of years ago to do such a study – I'm think I'm looking at one of our fisherman out in the audience who has participated – and recalculating what those conversion factors would be. Are there any other questions? John.

MR. JOLLEY: Just a comment, in billfish when the fish are fully pre-spawning ripe, the gonads can weigh 10 percent of the total body weight.

DR. DUVAL: All right, if there are no other questions for Mike, I think we will turn it back over to Jack to run us through the status of amendments under review.

DR. LARKIN: I have actually a quick question. Did you want me to go through mackerel real quick? It is like five slides. I know we're not doing mackerel right now, but I won't be here on Thursday for the Mackerel Committee. Do you want me to the recreational landings on mackerel really quick?

DR. DUVAL: If the Mackerel Committee Chair is okay with that, sure.

DR. LARKIN: It is the same formats and you guys will be familiar with it.

DR. DUVAL: It is just that we're not going to get into a protracted discussion of mackerel landings.

DR. LARKIN: Here is the coastal migratory pelagics; and I realize now I should have included cobia. Cobia was in the other slides I showed you guys earlier. Now, again, the same thing – actually, these ACLs are defined in MRFSS, so we didn't have to worry about the MRFSS/MRIP conversion. They are still defined in MRFSS for both king and Spanish mackerel in the South Atlantic.

Again, landings are from Waves 1 through 4 for 2013, the most recent landings, so that would be again January until the end of August. Headboat landings were not available for these two stocks. This is where we were in 2012/2013. The seasons are not calendar year; they're from March to February; so 26 percent for the king mackerel and then 54 percent of the ACL for the Spanish.

And the current landings we have right now; King mackerel at 11 percent and Spanish mackerel are at 26 percent. Then from 2004/2005 all the way down to 2013/2014; currently king mackerel is at 729,000 and then you can see the landings relative to the ACL there. Then Spanish mackerel, 2004/2005 all the way down to 2013/2014; 662,000 is our current landings for the fishing season. Then you can see the landings relative to the ACL again here. That's it.

DR. DUVAL: Are there any brief questions for Mike about any of the mackerel landings? Now we will move on to the status of amendments under review.

DR. McGOVERN: I'll talk about the status of two amendments; Amendment 27 and Regulatory Amendment 14. Amendment 27 includes actions related to removal of blue runner from the fishery management plan; extension of management into the Gulf of Mexico for Nassau grouper; allowing for an increase in the number of crew members on dual-permitted vessels; and evaluation of captain and crew harvest restrictions on for-hire vessels.

The proposed rule for Amendment 27 published on September 27th and the comment period ended on October 28th. The Notice of Availability for the amendment published on September 18th and the comment period ended on November 18th. The final rule package is under review right now in the region. For Regulatory Amendment 14; that has been undergoing reviews for the amendment. We expect that amendment to be submitted to us by the council very soon.

DR. DUVAL: Are there any questions for Jack? It is pretty brief compared to what we normally are going through in terms of our amendments under review. The next item under our agenda is a report from our Scientific and Statistical Committee Chair, Dr. Barbieri.

DR. BARBIERI: I will try to make this as short and sweet as possible. All of you probably already know my affinity with brevity. This is an overview of our agenda back at the October SSC meeting. We had a very full agenda, a whole number of different items, but fortunately for you I'm not going to be covering all of this today.

Actually, you have already covered the SEDAR activities. The Spanish mackerel assessment projections we're going to be discussing on Thursday morning. We had already a very good discussion today about the ACCSP Biological Sampling Process. We have a step forward with that. John and I and staff will be communicating to the SSC. As John mentioned, in terms of the assessment reviews we had a delay with the mutton snapper update that FWC is conducting.

We had an issue with some of the recreational fisheries data and the conversion of MRIP data; from MRFSS to MRIP and going backwards and using the right equations for the conversions. That has caused a delay so that assessment is going to be ready some time in the spring or summer is our prediction right now.

We did have a review of the SEDAR 32, which I'm going to be discussing with you. As John mentioned this morning during the SEDAR Report, the SSC decided not to proceed with a review of snowy grouper, SEDAR 36. We are requesting that assessment be presented to the committee again at our April meeting, April 2014.

Then I will review very briefly with you a presentation that we received on data-poor assessment approaches that was conducted by a group of international-level scientists and provided some guidance for us on some of these data-poor approaches that we had been using and had been thinking about using and gave us an idea of some of the advantages and the shortcomings of some of those methods. I think it was instructive to us and it will be to you as well.

ABC Control Rule PSA components; it was really a discussion that the SSC wanted to have about how we are using that productivity/susceptibility analysis factor into our ABC Control Rule. That discussion basically expanded into a broader discussion of what is going on with our ABC Control Rule; the fact that it will be very good for us to have an evaluation of the performance of our control rule that has been applied for the last several year.

I will give you some more details as we get to that slide; and then all the regulatory amendments and actions that we reviewed in the Council Workplan Update you have already received or will be receiving directly from staff. Our agenda really is now just those five items that I will try to rush through the best I can, considering it's me.

One of the issues that we discussed was a very important issue that has been on the SSC mind for quite a while. We had received a few years ago, maybe a couple of years ago, a broad document that was put together by the Southeast Fisheries Science Center evaluating a number of approaches that can be used for setting the minimum stock size threshold, the MSST.

Right now the basic default equation that is used for MSST is basically multiplying the spawning stock biomass at MSY – that is given by MSY by this factor here – one minus M where M is natural mortality. The idea is to generate a scalar that you can multiply by the spawning stock biomass and give you different sized buffers between the SSBmsy and the MSST, depending on the magnitude of the natural mortality.

If the natural mortality for a species is very small, you end up with a larger multiplier here, a higher number, and you end up with a larger proportion of the SSB as the MSST. But another

way to do this and is actually a way that all of you have reviewed and discussed – and I think it is part of one of your amendments – is this idea of simply using this multiplier of 75 percent of SSBmsy. This is a standard procedure that is used by several other councils and not any less desirable than the other one.

The SST discussed this. Just to give you a visual here of what we are talking about, I give you an example here with Spanish mackerel. You have the spawning stock biomass over time here from 1950 to about 2012, and you can see the trajectory of biomass. Then you have here the spawning stock biomass at MSY and down here what is now the value for MSST for Spanish mackerel. This is a made-up example.

The red line is really what could be conceived as that 75 percent of – I mean, this would be 1 minus M by definition of MSST; and this one would be the 75 percent of SSBmsy. The advantage of having that 75 percent of SSBmsy as your MSST is that you allow the stock to go through some of those fluctuations that you would have as it is approaching MSY without you having to come up with regulatory measures to correct something that just represents fluctuations in recruitment, strong versus weak year classes.

So allowing a bigger space here; in this case would allow you to live with these fluctuations here and not really have any cause for concern unless there is something that brings the biomass below MSST. So just to refresh your memory about how MSST works in relation to the SSBmsy and how the two derivations of that quantity would impact our management of stocks.

The SSC reviewed this document that the Southeast Fisheries Science Center staff prepared – it is very thorough – and looked at different – not just at that 1 minus M SSBmsy, but a whole number of other possible derivations of MSST and thought that all of those would be okay. It is hard to make a choice amongst them unless you had some kind of MSE, a management strategy evaluation, or some other type of a simulation-type process in place that would give you some results on how those different MSST estimations would perform.

Without that and the fact that the council had expressed – indicated an interest in adopting the 75 percent of SSBmsy, the SSC agreed that at this point considering how this has historically been used by different councils, and there is no real reason for concern, the SSC expressed on concern with the council adopting this approach. So basically our recommendation to you is that if you so with to proceed with this new calculation of MSST, we don't have any scientific concerns to bring forth. Madam Chair, I can pause here and ask for questions.

DR. DUVAL: Does anyone have any questions for Luiz? I just want to make sure that folks understand that for those species that have a very low natural mortality, those kinds of fluctuations that Dr. Barbieri is referring to would put us back and forth between having to do a rebuilding plan or not having to do a rebuilding plan and doing a rebuilding plan or not. We could be in overfished and not overfished conditions fairly quickly just due to natural variations. Are there questions? Ben.

MR. HARTIG: Luiz, you showed the Spanish mackerel and it is below; is that a general rule for that or would it change based on comparing 1 minus M and 75 percent for different species with different Ms?

DR. BARBIERI: No, it would vary, yes, depending on the value of M that is being used for different species. The idea here was just, as Michelle explained, to show you an example when you have those fluctuations – like over here the stock is kind of bouncing around, up and down that line; you'd be actually considering the stock at that point to be overfished and you'd start a rebuilding plan that may not be absolutely necessary. That could happen multiple times if due to natural variations the stock is just fluctuating around an average.

DR. DUVAL: Are there other questions for Luiz at this point? Please proceed.

DR. BARBIERI: The other item that the SSC discussed had to do with our stock assessment recommendations was the use of deterministic versus probabilistic fishing level recommendations. That means that sometimes – and you can look at the table down here – I mean most often we give you the status determination for a stock based on this deterministic value here of ratios between the current spawning stock biomass to MSST for the biomass status of the stock; and then the ratio of current estimated fishing mortality relative to fishing mortality at MSY for the exploitation stock status.

That way we can evaluate whether the stock is overfished and/or undergoing overfishing. But these deterministic results here from the stock assessment that indicate the stock status are based really on our base run – and I put some plots here of the probability density functions that you get for some of the parameters; that meaning in the assessment process there are these simulation type exercises where you bootstrap the data and you vary the parameters within some bounds just to have an idea of what the variability in some of the parameters or variability in the data would cause in the outcome of your assessment.

It is like a simulation type when you rerun your assessment multiple times using different combinations of parameters and data points that you draw from that population to generate this probability density functions. Now, this will represent a multitude of outcomes – in this case here for fishing mortality and in this here for the spawning stock biomass a multitude of outcomes in your assessment.

So we are looking for areas where you have this mode or the dome of the probability density functions that indicate that is the area that is most likely for your results to happen. So you want to have your base run in an area that is close to that dome. Depending on the shape of that dome, you know, the height and the width of that dome you can have an idea of how much uncertainty you have in your parameter estimates.

An issue came up specifically with Spanish mackerel that got those two concepts a little sort of confused because we had some results of the assessment that came out of this deterministic outcome of the assessment. This would be what comes out of this line here; that one outcome, that one combination of data and parameter choices.

But when we did the uncertainty evaluations, the Monte Carlo Bootstraps, to generate these distributions; as we did the projections, the outcome of the projections were actually proposing catch levels that were higher than the catch levels that had been determined by the deterministic results.

This is a long way to explain that the two of them were not really completely in sync; and that generated the SSC to start discussing, okay, which one would be the most correct approach for us to use as we report to you the result of assessments. When we're giving you the results of the assessments and we want to talk about stock status, what is the exploitation status, what is the biomass status of the stock; do we give you the deterministic or do we give you the probabilistic?

The SSC discussed this. There are pros and cons to all of these approaches, but basically the committee decided there is no concern here in actually using both approaches. Those approaches could be used for different purposes. For actual stock status determination, we recommend the use of the deterministic outcome results; because in this case that deterministic result, that one run signified here by these vertical lines, represents the model configuration, the parameter choices that were considered the base run, the reference run, the most likely run to be correct, that was chosen by the assessment panel and approved by the review panel.

So that one combination is the best informed combination of parameter choices, of model configuration and structure; so that one will give you the deterministic stock status determination, but we can give you also the probabilistic one as a way to inform you about the uncertainty of the results and to give you a sense of confidence on the likelihood of the deterministic outcomes.

For example, in this case here we are saying 87 percent of the Monte Carlo Bootstrap runs were above the SSBmsy; so it is very unlikely this stock is actually overfished because the vast majority of those simulation-type runs actually agreed with the deterministic outcome. The same thing for the exploitation status of the stock; 89 percent of the MCB runs were below Fmsy; so it is very unlikely that the F was actually higher than what it should be.

From now on, as we give you assessment results – and I know this stuff is not very exciting and it is difficult to explain, but I think it is informative for you to know why we want to present you with both types of outcomes and that we're using them for different purposes, and we don't see a conflict with you getting both of those sets of results applied to different purposes. With that, Madam Chair, I'm going to pause again and see if there are any questions.

MR. HARTIG: Yes, just a plug for the MREP Program. I mean, really, if you want to start getting down into really understanding this at some level of detail, it is a great time to ask council members to go ahead and take that course. I highly recommend it.

MR. JOLLEY: Luiz, this might happen in the future where you run these two and they don't agree very well; then what do you do?

DR. BARBIERI: Well, in that case if they don't agree very well, the assessment panel probably wouldn't have made that choice as the base run; so the assessment would not have been

completed. The base run wouldn't have been chosen that way because it would be very unlikely that combination of parameters would be realistic. That is why those things get taken care of during that assessment and the review process.

But, for example, just to add to that, Madam Chair, if you have here probabilities in this probabilistic side of things that are closer to 50 percent – I mean, your level of confidence in the deterministic outcome will be different than when I tell you there is almost a 90 percent certainty there that the outcome is what is to be expected. It was really a way for you to appreciate the reliability and the uncertainty level that is associated with the deterministic outcome.

DR. DUVAL: Are there any other questions for Luiz on this particular concept issue? All right, then, moving on.

DR. BARBIERI: We also received a presentation. The Southeast Fisheries Science Center staff came over. Dr. Todd Kellison came over and gave us a presentation about the SERFS I believe is the new acronym that is being used for the surveys that have to do with reef fisheries. Specifically in this case the question and the discussion were related to the video monitoring.

The SSC was aware and received an update from the SEFIS folks. Marcel gave a presentation and I think Joey Ballenger as well gave a presentation to the SSC describing how the surveys have been conducted and gave us like an update on the results. The video monitoring part of things had not been described in detail to the SSC; and the SSC was interested in learning more about how the video monitoring would be used in developing indices and assisting in quantifying some of those stocks for stock assessment purposes.

We had that discussion, which was very instructive but not really sufficient to address all of the issues that the SSC was interested in getting to. The committee then is requesting that a workshop be held in the next six months to review methods for developing abundance indices from the SERFS Video Monitoring Program.

We would like that workshop to include Southeast Fisheries Science Center staff, of course, who have been intimately involved in this process. It would be great to have SSC members participate as well and some other invited scientists that work on this type of video survey methodology.

We also thought that given the fact that the Gulf folks have been doing this for longer, and they have I think science center staff there that have been conducting this for a decade or longer; it would be instructive to have them at this workshop as well to help us discuss some of the topics. And this is why we're requesting this to happen within the next six months and we ask you that this be done so soon, so ideally we are ready for the SEDAR 41 Red Snapper Assessment where we can probably take advantage of some of the fisheries-independent indices of abundance.

DR. DUVAL: I think Bonnie has a comment or a question for you, Luiz.

DR. PONWITH: I think this is a good idea. In internal discussions, the methodology for converting video to an index is an important issue for this stock assessment. There is a lot riding

on it and getting it done well. Our original notion was to create sort of a short list of approaches and put those forward to critique in sort of the precursor to the assessment.

I think the workshop approach is fine. It is a great opportunity then to be able to discuss more completely those approaches and make sure that we're on really firm ground in doing that. My question to you is I think the idea of including someone from the Gulf is a good idea. The people who gather the data and the people who develop the index tend to be different people. I'm guessing you're less interested in the video monitoring staff than the people who actually develop the index; is that right?

DR. BARBIERI: No, not really, because I can tell we have been for the West Florida Shelf – you know, the state of Florida at FWC has been conducting – and we work very closely with the Panama City NMFS Laboratory jointly on using the underwater video for monitoring the West Florida Shelf reef fish stocks. There are so many different nuances to how that is done, the type of camera that is used – I'm sorry; I misunderstood your question?

DR. PONWITH: Here is where the issue is. The workshop is a good idea. I think really refining your objectives – is your objective a sampling methodology workshop to evaluate how we're doing it and is it working out well the way we're gathering the data; or, are you trying to take the data that have been gathered and figure out the best way to convert it into an index for use in the assessment? Those are two completely different questions. Both of them are interesting and germane.

One is urgent and the other one is at this point – after gathering this much data, do you want to circle back and revisit the methodologies to make sure we're – that's an important question; the other one is an urgent question. If the time of the workshop is long enough, you may be able to tackle both, but I think it would be really important to separate those as two completely different issues. If you only have time to do one, the development of that index is the one I think that would be the most urgent.

DR. BARBIERI: And I agree completely, Bonnie; however, what I was talking about is that our experience is our folks developing the indices mostly don't actually ever go out in the field and operate any of the equipment, and they're usually not the people who actually sit there to watch the videos and interpret how you are actually doing your counts and how do you avoid double-counting, how are you taking measurements, how do your measurements actually get extrapolated and expanded into a population level size composition, for example.

So the idea was if we can get the index development personnel together in the same room for this cross-pollination, what you're getting are the realities in the field versus application of the index standardization methodologies and we might able to cross-pollinate and end up with a better project.

I think that was primarily the SSC's intent in having all of those folks in a workshop is to allow as much of that cross-pollination as possible. But because of some of these idiosyncrasies I would say that come out of using different methods for counting, for measuring, depending on the type of camera; you could really benefit from having the field-based staff communicating and

exchanging with index development staff and helping calibrate each other. I don't know if that makes sense or not, but that was the thought that the SSC had.

DR. DUVAL: Are there any other questions or comments for Luiz on this particular issue?

DR. BARBIERI: Then the assessment that was reviewed by the SSC at this last meeting was the blueline tilefish assessment. This was part of the SEDAR 32 and it was a benchmark assessment. The assessment as a benchmark, of course, went through the three-workshop process and was reviewed by a panel of CIE reviewers and had a very intense SSC participation in the review panel as well.

We were confident that we could proceed with the review of this assessment. For the exploitation status of the stock, overfishing is occurring. When we look at the estimate of the current level of fishing mortality relative to what you would want the fishing mortality to be for MSY, you can see that the current level is over two times the level that would be given for MSY; so overfishing is occurring.

In terms of biomass status, the SSC actually considered two possible outcomes not knowing exactly how you would proceed with your choice for MSST. Assuming that your previously stated preference to have MSST set at 75 percent of SSBmsy, we can say that the stock is not overfished. It is very close to that line, but it is a little bit above it in terms of biomass. If we use the previously adopted definition of MSST, then the stock is overfished by not much, but it is. This something that I think – and, John or Myra, help me here, but I think we're going to need to have some action relative to this definition of MSST.

DR. DUVAL: That's correct and I think we're going to take that up later on in the agenda tomorrow afternoon when we have the discussion of Amendment 31, which is specifically dealing with blueline tilefish. I think there have been some suggestions for a regulatory amendment to perhaps deal with that MSST definition not only for this species but potentially for other species that are in a similar situation of very low natural mortality.

DR. BARBIERI: This is just for your information. The assessment had the steepness parameter fixed at this 0.84 value instead of being estimated. Basically the stock-recruitment relationship was not informative enough. The data that you actually plot and look at to see how your recruitment relates to spawning stock biomass; that relationship was not informative enough to allow you to estimate the steepness parameter.

The assessment panel, working together with the analytical team, made a choice – a well-informed Bayesian-type approach, a statistically valid approach, using priors and using meta-analysis of steepness values for reef fisheries made this choice of 0.84; but as far as the SSC is concerned, basically this assessment wasn't capable of coming up with an estimate of steepness; so we sort of penalized a little bit the P-star value and increased it a little bit to account for that lack of ability to estimate steepness.

So when we apply the ABC Control Rule, which looks at all those different factors, we came up with a probability of overfishing we recommend of 30 percent for blueline tilefish. Now, in

terms of catch level recommendations, OFL and ABC, for blueline tilefish, at our SSC meeting we did not have the full set of projections, which is often the case because the analytical team doesn't really know what value of P-star is going to come out of the application of the SSC's ABC Control Rule; so we cannot really completely predict what is going to be there and produce all the outputs needed.

The projections were not available; and the SSC, based on that 30 percent P-star for ABC, then requested the center provide some projections; a yield stream with a P-star of 50 percent that would be used for setting the OFL, the overfishing limit, for several consecutive years and a P-star of 30 percent, a separate yield stream at this probability of overfishing at 30 percent for the ABC so you have that buffer between OFL and ABC.

However, as I looked into the additional projections that were provided by the center and considering the level of uncertainty, there are some issues with the recruitment and values that came out of the projections that warrant, in my opinion, further review, further evaluation and discussion.

We are requesting that these projections be reviewed by the SSC again, be sent back to the SSC similar to what you did after the June meeting with the Spanish mackerel, when you felt that the SSC – I mean the projections that came out needed to be looked at again and the catch level recommendations made by the SSC could be revisited.

We're going to be discussing that on Thursday morning. Here I'm requesting that you take the same action and allow the SSC to actually look at those projections and work with the center, the analytical team at the center to try and better understand the content of those projections; so whenever we can give you catch level recommendations, we can actually have a better understanding and can explain to you better the whys of the outcomes that are coming out.

Right now if I were to post and show you the yield streams that we had for OFL and ABC, I really wouldn't have been able to explain to you why things are turning out this way. We have to look at that data and the analysis in more detail. I'm going to refrain from making a formal catch level recommendation and requesting that those projections be sent back to the SSC for review and we will work with center to revise them if necessary.

MR. HARTIG: You based it on the relook back on recruitment issues and what was the other one?

DR. BARBIERI: Looking at all of the landings' data; looking at the stream of landings' data. There are so many components to the assessment that I think it will be informative for us to look at and to see how they're being treated in these projections to help us understand what is going on and going forward. I'm not saying that the projections are unacceptable, whether they're incorrect. I'm just saying that we haven't really as a committee had the opportunity to review them, and I think it would be beneficial and more informative to you if we did that.

DR. DUVAL: Generally when a stock assessment comes before the SSC for review, there are some standard projections that are done of F at rebuild, F equals zero, 50 percent likelihood of

rebuilding, things like that; and so as Luiz stated, once the SSC actually applies the control rule, they may need an updated set of projections.

The updated set of projections, which is in your briefing book, is quite a bit different than any of the other projections that came out. We will have more discussion about this tomorrow afternoon when we talk about blueline tilefish, but the SSC is requesting the opportunity to take another look at those.

DR. BARBIERI: Than on evaluating the performance of data-poor approaches, as I mentioned earlier, we had a group of international level fishery scientists that got together. This is something that is being commonly done now throughout the world, really globally, in terms of evaluation of the performance of these data-poor approaches.

There are several stock assessment conferences that have taken place over the last few years that have had presentations that have to do with this very topic. In this case this group of scientists were interested in looking at the southeast U.S. and the data-poor methodologies that have been considered and applied here and run the simulation type, the management strategy evaluations where you simulate the whole system.

You simulate the fishery, you simulate the management framework that is being used, the application of that, and you can then, with your known data, measure the performance of the data-poor stocks. You have your original made-up data so you can actually control everything. To us this was very informative because this is something that we've been in need of as we provide you with some of the catch level recommendations that are based on the data-poor assessment methods. We don't really have a way to evaluate which ones have higher or lower uncertainty and how do they perform; so having this in front of us was really helpful.

The take-home messages is that control rules are catch rules that use maximum catch like the third highest catch or maximum catch scalars lead to high probabilities of overfishing and could in the long term lead to lower yields particularly for stock levels below MSY, biomass at MSY. This is a warning signal here that some of those methodologies cannot be as effective or have higher levels of uncertainty and higher probabilities of overfishing than what perhaps we would like to see.

Another one is that the ORCS Working Group Rule, which is one of the methods that we have been applying for southeast U.S. stocks, outperforms average catch rules and actually may provide adequate short- to medium-term approaches, allowing additional data and more complete methodologies to be applied, but still had some weaknesses.

The simulation also indicated that it may be very difficult to apply the data-poor stocks and come up with good management outcomes for stocks that are substantially below biomass at MSY. In some situations, as these stocks reach a very low abundance level and if they are data poor, we don't really have a quantitative assessment methodology to use, we end up having to apply some of this data-poor methodology. This is basically to make you aware of some of those weaknesses in those methodologies and make you aware of some of the risks involved as far as long-term yield productions for the fisheries.

DR. DUVAL: Are there questions for Luiz about this? It was actually a very interesting presentation to the SSC, and I believe that presentation is part of the briefing materials for the SSC so you can pull it up online. Those guys were chomping at the bit to get their hands on a couple of our species – I think blueline tilefish in particular – to try this and see what the results might be from this type of evaluation.

DR. BARBIERI: And, finally, we had some discussions about our ABC Control Rule and the PSA components and all the various components of the control rule. As I mentioned before, the committee basically noted that the performance of our ABC Control Rule has not been really fully evaluated. We have been applying it for a while and we haven't been able to evaluate how it has been working out; whether it is providing outcomes that are predictable and that we would like to have or not, and we are not so comfortable with.

The SSC's recommendation is that a subcommittee be put together – and we're organizing that right now – to some time in 2014 – and I think the target date is October – have this discussion in more detail for the October SSC meeting; that we look through this subcommittee into several components of our ABC Control Rule and try to have some evaluation of the performance of the control rule and address some issues; whether we want to actually continue using the PSA, this productivity/susceptibility analysis approach together with our control rule for quantitative assessment – for stocks that have had quantitative assessments or do we apply the PSA simply to those data-poor stocks for which we don't have quantitative assessments.

Our scoring system now has some issues that need to be revisited. The rule works very well now – it seems to – but we are aware of some of the issues that could be improved. There is always a need to evaluate how some of these methodologies are performing and what we can do to improve on what we have. Weighing factors for the control rule dimensions; right now all the factors are weighted equally; and we don't know if that's the best approach or not. Having had some years of the application of this control rule, it will give us some experience in evaluating this.

Then any other issues that the subcommittee may identify through this review process that will be brought to the full committee in October for a more detailed discussion. I just wanted to make you aware of this because it is something that the SSC takes very seriously is development and application of our control rule and we want to keep you aware of where we are in evaluating its performance.

DR. DUVAL: Well, and it certainly impacts what we do here so we want you to evaluate that rule.

DR. BARBIERI: And I think, Madam Chair, unless I have questions about this last item, that completes my presentation.

DR. DUVAL: Are there questions for Luiz on anything in his report? Will you be around tomorrow for any part of our meeting?

DR. BARBIERI: Yes, I will be available all day tomorrow and most of the day on Thursday. I will give a presentation on Thursday morning to the Mackerel Committee for the revised projections and catch level recommendations. I will be available tomorrow.

DR. DUVAL: The next item on our agenda is our advisory panel report, and Captain Robert Johnson is here to run us through that.

MR. JOHNSON: The advisory panel met on November 19-20 in North Charleston. We had a lot of discussion. Amendment 22 on the recreational tag program – I'm not going to go through every amendment. I'll just go over the recommendations that the AP had that may not be in your briefing book.

They decided that tags should not be transferable if a tag program is implemented. A percentage of the tags should go to the for-hire sector; consider issuing a larger number of tags than the ACL and requiring the unused tags be returned at the end of the year's season; consider a non-profit agency or contractor to administer the tag program. They did not have a strong opinion as to which entity should be awarded that.

We discussed the possibility of a stamp program again for the recreational sector. We have made this recommendation in the past to try to narrow down the sampling universe. It seems to us if you're going to have a tag program for species with low ACLs, it might make sense to move forward with some kind of recreational reef fish stamp so those people could be the ones that would be applying for those tags.

The AP also supported Alternative 2. We had a motion by the AP that recommends adding an alternative to Action 3 that would establish a tag issuance program that would base a percentage of the tags issued on the for-hire sector's historical participation and consider a control date. The AP also asked that the council allocate to the extent possible historical participants and resort to a lottery distribution when absolutely necessary.

The AP also recommended that the council consider reintroducing an action to define what a "low ACL" is. We weren't clear on what that was going to be; and our concern was some species like red snapper would be implemented and locked into some kind of tag program. We also felt if the tag program was implemented, it would be issued primarily through an electronic web-based lottery and that we also wanted all cost-recovery fees would be the responsibility of the recreational harvest tag lottery entrant. Fees would be assessed at the time of entering the lottery.

Moving on to Amendment 29, gray triggerfish, the AP wants the council to consider a commercial split season for gray triggerfish. That would make gray triggerfish available when other snapper species are closed. This was I think a recommendation of one of the fish dealers on the AP.

Again, the AP recommended that the council increase the minimum size limit for hogfish to 14 inches or look at a range between 14 inches and 18 inches. We also had a minimum size limit

recommendation of 14 inches for gray triggerfish in federal waters off North Carolina, South Carolina, Georgia and East Florida.

Another recommendation was for a spawning season closure for the commercial sector for gray triggerfish and then another recommendation would – I'm going through these really fast because I know we're running short on time. The council should consider reducing the bag limit of gray triggerfish recreationally to eight fish.

I do want to back up and say that the tag program, the vote on that, just so you know, was eight in favor and six opposed, so I guess the AP did support a recreational tag program for species with Low ACLs. On the gray triggerfish again, the AP wished the council to consider trip step-down alternatives using 75 to 80 percent of the ACL. They also wanted the council to set a commercial trip limit of a thousand pounds for gray triggerfish.

Moving on to Regulatory Amendment 17 about MPAs, first I want to say that the AP did pass a motion that was in support of protecting spawning fish as a – I'm going to read it, "Protecting spawning fish is a commonsense approach to management. The council should prioritize areas of known spawning activity when it considers Regulatory Amendment 17 and put in place targeted closures to bottom fishing only, to allow for surface trolling and minimize socio-economic impacts of the proposed MPAs."

The concerns of the AP are the concerns that I've heard from the council and the public that the questions are what level of reduction of bycatch is needed. A lot has been done for these species and we still don't know the benefits. These species will take a while to recover. These are just points that were made. It may take a long time to see benefits of the MPAs we have in place.

Again, we were concerned about protecting these fish while they're spawning and felt like we need to know specific areas and make them as small as possible. Also, the estimates of economic impacts are way off. There was no recreational impact on any of the tables and we really felt like they had no use at all, because you just didn't even consider the largest user group in the South Atlantic when you estimated impact. We don't have any information on how well the previous MPAs are working, and we'd like to see that. The last thing on Regulatory Amendment 16; we did recommend Alternative 4, keeping the November 1 through April 30 closure in the designated right whale critical habitat, as the preferred.

DR. DUVAL: Thank you for that, Captain Johnson. I think a lot of the AP recommendations have been incorporated into decision documents and the updated versions which we received in the second briefing book; and I believe you will be around for the day and tomorrow as well. Captain Johnson will be here and available for consultation as we go through the rest of our agenda; but are there any questions for him right now from folks? Zack.

MR. BOWEN: That was a great report. I have a question. You alluded to the AP voted in favor of eight to six for a tagging program; but prior to that you mentioned that the AP was concerned about red snapper being involved in that. Can you give some testimony of what the AP's opinion is of the red snapper being involved in that tagging program?

MR. JOHNSON: Zack, I think the thought among the AP was we have some species like snowy grouper that have extremely ACLs, 500 and something fish. Okay, we didn't want to see red snapper locked into a category of stock that probably the overall consensus on the AP is rebuilding and is increasing.

We didn't want to see them put in the same category as something has a 97 percent commercial allocation, that even when the stock is rebuilt will probably never have a very large ACL. I think we see some need for some kind of tag program for some species, but only those with very low ACLs, and that is why we would like the council to really determine what constitutes a low ACL, so we'd have a little bit more guidance.

MR. BOWEN: So the AP is not wanting red snapper involved in the tagging program at this time; is that correct?

MR. JOHNSON: That was sort of the mood. We did not make a separate motion saying we prefer red snapper not to be involved in a tag program. We were mainly looking at snowy grouper, golden tile, wreckfish; species that we know have extremely low ACLs and numbers of fish allowed. I guess I can't answer your question specifically. We did not address red snapper specifically saying, no, we don't want red snapper into a recreational tag program.

MR. BOWEN: That species wasn't addressed by the AP?

MR. BOWEN: No; we looked at the tag program just how it was presented to us. It was given to us as a program for species with extremely ACLs; and so we don't consider red snapper don't be an extremely low ACL when we look at a fish like snowy grouper that opens up every January 1st with 500 and some fish allowed to be caught in the whole South Atlantic.

MR. HARTIG: Robert, the AP, in their evolution to their MPA paragraph that you read, basically you all started out going down the road to try and do what we asked, and it was obvious to us sitting in the audience from the council that you didn't have the information you needed to make your decision.

As you went through these different MPAs, the frustration level increased at each juncture about not being able to complete the job that you were asked to do based on you don't have the information you need to make that decision. That is where this paragraph basically came out of the AP after they had gone through some of the areas to consider, and then they came back and said, "Wait, this is really what we need; what our stance is now given the level of information we have."

MR. JOHNSON: That is correct. We feel like a more targeted approach because we really don't have the information that we need to make decisions on these other areas.

DR. DUVAL: And we did tell the AP that there would be another opportunity to review this document and that the council would be receiving these presentations, which we're going to get into tomorrow, on the research and monitoring that has occurred within the existing MPAs. Some of us were discussing afterwards that it probably would have been better if we had simply

asked you all what are the pros and cons of these different locations at this point based on what you know rather than trying to certainly ask you to make motions regarding inclusion or not of particular sites for analysis. Mel.

MR. BELL: I was just going to say they really did a great job. I know most of us were there; but if you weren't there, they really tried to give us what we asked for at first and they spent a lot of time working through it. Then they became frustrated with the same thing that we had been, which is, well, we don't have enough data to say yes or no on some of this. That is what we hope we'll get out of this meeting here, but they really did try.

DR. DUVAL: All right, anything else that regards the advisory panel report? If not, we're going to move on to the presentations on the Oculina Experimental Closed Area. As part of the ten-year re-evaluation plan, the council needs to review the efforts to date in meeting the different components of the re-evaluation plan. I think Anna is going to give us a little bit of background on this before we get into the presentations.

MS. MARTIN: As you recall, Snapper Grouper Amendment 13A put into place the snapper grouper fishing restrictions within the Oculina Experimental Closed Area. The amendment required within three years of implementation of the amendment that the size and configuration of the area be reviewed and also that a ten-year re-evaluation of the entire area also be reviewed.

An evaluation plan was developed by the council as a part of this review process. An evaluation team was also formed to help guide this evaluation process. This evaluation team met in 2007 and provided guidance to the council. They reviewed components and projects from the evaluation plan and made a recommendation to not change the size and configuration of the Experimental Closed Area of the Oculina Bank.

That is the portion within the Oculina Bank that is closed to snapper grouper fishing. The ten-year re-evaluation is due to the council in 2014. We have plans to convene the evaluation team in early 2014 in a webinar format is what we have discussed; and at which point they will discuss the evaluation plan and any necessary updates; provide recommendations that the Snapper Grouper, Habitat, Law Enforcement, Coral and Deepwater APs will review next spring; and then a final report would then be distributed and presented to the council in June of next year.

We have initially reached out to the evaluation team that participated in the 2007 report to the council. We have heard back from a number of them. At the conclusion of the presentations or in full council, whatever time is appropriate, I'd like to walk through with you and just point out who was on the evaluation team. We have reached out to them initially to gauge their interest in participating in this 2014 update to the council. We have heard back from a number of them.

We're looking for the committee's guidance on any new recommendations you have reaching out to folks that might want to participate in this process; particularly folks with an interest in the Oculina Bank and the Experimental Closed Area in particular. I can go through that with you after these informational presentations.

We have Kim Iverson on council staff here to review with you some outreach efforts that have been undertaken in the Experimental Closed Area since 2007. Rich Chesler is here with NOAA Office of Law Enforcement to review with you some of the enforcement efforts in this area; and Stacey Harter with the Southeast Fisheries Science Center is here to talk about some of the research that has been going on in the Experimental Closed Area since the 2007 update.

DR. DUVAL: Thanks for that, Anna, and I believe the presentation that Kim is about to give is Attachment 3C in your briefing book.

MS. IVERSON: I will go through this as quickly as possible. I think Anna covered several of the highlights of the presentation. I just wanted to give you a bulleted list of the history behind the Oculina Experimental Closed Area. I won't go into detail, but it has been in development since 1984 when 92 square miles were designated as essential fish habitat.

In 1994 the HAPC became the Experimental Closed Area, that 92 square miles, and fishing for snapper grouper species was prohibited and possession prohibited within that area. The area continued to be expanded as far as the HAPC. Then as Anna pointed out, there was Amendment 13A effective in 2004 that included an evaluation plan that must be developed, including outreach, research, monitoring and law enforcement.

You will hear from the research and monitoring and law enforcement components of the evaluation plan. As Anna pointed out, in 2007 and 2014 are reviews of this evaluation plan in the Experimental Closed Area. I wanted to go back just briefly for those of you that weren't around back in 2004 and talk about how we came up with the outreach component for this evaluation plan.

Before the evaluation plan was developed, we had constituent meetings down in Cape Canaveral and Fort Pierce. A lot of people had talked to us on the record and off the record that they had been around for a long time and had seen the changes within that Oculina Experimental Closed Area once that fishing was prohibited for snapper grouper species.

We had informal meetings. Some of our council members actually came down and talked with marina operators and bait/tackle store owners. We also went and reached out to the scientists that had been involved in that research and monitoring and with the Experimental Closed Area, including John Reed and his group of scientists from Harbor Branch and NOAA Fisheries, and worked very closely with the Port Canaveral Space Authority just off of Cape Canaveral.

We had a lot of interaction and lot of development of how we're going to go about to develop this outreach components. Andy Shepherd with the National Undersea Research Center and UNC-W was instrumental in coming to our advisory panel meetings and steering the efforts that were partnership efforts with our outreach component for the evaluation plan. The outreach plan had a very broad goal, increase the awareness and understanding and of Experimental Closed Area to fishermen, citizens and visitors of central and eastern and the U.S. Public; a very large, broad goal.

There were objectives identified, including developing the evaluation plan or the outreach component of the evaluation plan; having a campaign targeting fishermen which would involve the council and then a broader campaign through partnerships and finally evaluation. I just want to go quickly through those components.

As Anna noted, the plan was completed in 2005. The council-initiated projects included the campaigns targeting fishermen; the continued distribution of the council's regulations' brochure; working with fishing chart manufacturers; partnering with FWC for publications and mailings; developing news releases in conjunction with research and monitoring and law enforcement activities; developing a PowerPoint presentation and development of rack cards and posters for distribution.

Those recommendations came out as a result of those focus group meetings that were held and the evaluation team that was put together for the outreach component. In 2007 and again in 2010 we reprinted the regulation brochures that we no longer continue to print because of the changes in the regulations; but the Oculina Bank information was included and over 40,000 copies were distributed.

As you are aware of now, instead of printing those copes because they are expensive, we've gone to a regulations' app and summary information that is available on the council's website. As part of the app, there is a section on managed areas and the Oculina Experimental Closed Area Regulations are included.

We also have a Deepwater MPA Brochure and in that brochure the Oculina Bank information is available. We went to the printed chart manufacturers within the area and asked them to better identify. When we first looked at the printed charts, they said "fish havens" on them; and some of the fishermen actually thought they could go in there and fish.

We asked the chart manufacturers to change the nomenclature. I have not worked with the electronic chart manufacturers; but that is one of the things that we need to do is follow up and see how those manufacturers are now identifying these areas. We did include a feature article in the FWC regulations, back in 2007 with their saltwater fishing regulations, and those were distributed. We need to follow up and continue to do that partnership with FWC in getting more information out.

Projects 4 and 5 were identified, news releases and PowerPoint presentation. The PowerPoint presentation was something that was given a low priority. We did have a lot of news releases on the research and monitoring activities in that area. Rack cards; these have been extremely popular. We have printed over 10,000 copies; we just recently reprinted more.

We didn't print that many because we were concerned that there would be some changes; and so with printed materials you always have to be able to update those. Those have been distributed throughout the middle portion or the middle-eastern coast of Florida, including the Cape Canaveral area, the marinas and businesses. FWC and NOAA OLE offices have those available. We also partnershipped with the Smithsonian Marine Station down in Fort Pierce.

We have those available at all of our public hearings and council meetings that are held within the area. They're also available now from the council's website for download. Partnership projects; broader media campaigns were developed; again partnering with NOAA Undersea Research Center at UNC-W; NOAA Fisheries; Harbor Branch; FWC; and the Smithsonian Marine Station.

The website development, when the outreach efforts were first beginning, we added information on the council's website but also partnered with HBOI or Harbor Branch and the NOAA Teacher-At-Sea websites; and the new information, of course, has been added to – or the new website has that information and we need to continue to update that.

We also held teacher workshops in conjunction with research and monitoring activities; 2005, 2007 and again in 2008. These were extremely popular with the teachers. We partnered with Harbor Branch. John Reed was instrumental in providing the facilities and instructions. We had council staff, NOAA Fisheries staff that were involved in the instructions.

It included tours of the Smithsonian Marine Station in Fort Pierce. The teacher workshop materials were made available online. Joint Project Number 4 was to develop a portable display. This was done with the Coral Reef Conservation Project funding. We developed the presentation – and I think most all of you are familiar with that – with a kiosk that showed Revealing the Deep, the video featuring deepwater coral research.

This has been distributed or used at public hearings and council meetings and in limited use from other organizations and agencies. We have also done some excursions. We tried a media excursion in 2005. We got right up to the day and tried to go offshore with FWC. We partnered with the captain of the C.T. Randall. We ran into some really, really bad weather.

We got about three miles outside of the inlet and they called it quits and we had to turn around and go back. We were adamant that we were going to do that; so again in August of 2009 we partnered with Harbor Branch and the Research Vessel Seward Johnson. We had a VIP media excursion. They were actually able to deploy the submersible and had information stations set up on board.

These are some of our VIPs, including our council chairman Ben Hartig who was able to go out with us on the excursion. Rudy Ellis from the Orlando Sentinel; she sent a reporter at the bottom along with Jennifer Schull; and we had an NBC crew that actually came out and did a feature story. They're holding little cups – the submersible actually took down those Styrofoam cups – and kept those as parting gifts. The media excursion was very well accepted.

We had all the scientists on board, the stations set up to talk about the research and monitoring activities that were ongoing in the Oculina Bank. We were blessed with perfect weather; so we really needed to do that. We were about 15 miles, 18 miles offshore. The media stories that resulted were positive for the most part and increased interest from reports throughout the state and also through NBC Nightly News.

We had also Joint Project Number 7, which is a data buoy that the team had recommended that we have data buoys deployed in all four corners of the Oculina Bank. That really wasn't economically feasible so we did the next best thing; and we partnered with the NOAA Data Buoy Center and have a direct link from the Station Buoy 41114 at Fort Pierce that gives you information on the Oculina Bank regulations.

We also partnered with the Smithsonian Marine Station. If you look there, that was their very first interpretive and one of the only interpretive displays on the oculina coral in the world. It consisted of some information and a video in a corner. When we brought the scientists together, they all agreed that we needed to improve on that; and so now again it is one of the only interpretive displays for oculina coral, but it is greatly improved and it is a really nice facility.

If you're ever in Fort Pierce, I would encourage you to stop by and see the Marine Center. It is a small educational center there. Evaluation; at the time we were concerned that we would have to jump through multiple hoops in order to do a survey, so we partnered with the Florida Sea Grant. It was a limited distribution of the initial survey, but we did have some survey results to come back in; and we thought it would be good to get a baseline survey at the time.

As part of the evaluation; we wanted to have continued community input. There is actually an Oculina Bank in Fort Pierce, and they do lend money. For every new account that is opened, they give a dollar to the Oculina Bank Research and Monitoring Programs through the Marine Station; to the Smithsonian Marine Station.

We have our rack cards at the Oculina Bank and we are contacted by them periodically for us to send more. The charter captains, the businesses in the area have continued to be involved by distributing informational brochures and the rack cards; but we need to go back and reestablish – as Anna said, some of these folks haven't been contacted in quite a while from the evaluation team.

In summary, we've done a relatively good job of cooperating with our partners to achieve the outreach projects that were outlined. Several projects are ongoing. Others are really dependent on research and monitoring activities. We want to continue to distribute the regulation information; work with the fishing chart manufacturers in ways that I just spoke about earlier; coordinate better with our partners including FWC to get information out; do news releases and features on ongoing research and monitoring activities.

The PowerPoint presentation may be something that we want to look at or use YouTube or some of our social media tools to distribute information. The rack cards continue to be popular. Fishermen like them; the bait and tackle stores like them. Continue to add our teacher workshop information to our new website – our teachers left there really excited about the program – and so again coordinating with research and ongoing research and monitoring activities; and, of course, I think we'll need to update our portable display as some of these boundary areas may change.

Evaluation continues to be a challenge. We could do additional surveys; get community involvement; go back and talk with some of the folks that were involved in the initial evaluation

plan; and we're, of course, always open to other methods. That's it quickly in a nutshell. Does any have any questions?

DR. DUVAL: To me it sounds like the majority of the outreach components of the evaluation plan have really been met or significantly underway; and the ones that haven't been, it is a matter of waiting on some other folks. Kudos to you all for what you've done. Ben.

MR. HARTIG: I would echo that, Kim. You've been in this from the very beginning and you've worked really hard to get this done. Then with the rest of the staff's help, we've done a really good job on outreach for oculina. It is because of you and other staff's efforts that we have done that, so thank you.

DR. DUVAL: Are there other questions or comments for Kim. If not, then we will move on to the next presentation, which I believe is from law enforcement regarding the enforcement efforts within the closed area.

MS. MARTIN: This will be Attachment 3D in the briefing book.

MR. CHESLER: My name is Rich Chesler. I am a special agent assigned to the Port Orange, Florida, Field Office with NOAA's Office of Law Enforcement. Previously our office was located in Titusville, Florida. About two years ago we move it further north. I've been assigned to the Titusville/Port Orange Office since 2003 and have been assigned as the Oculina liaison agent since 2003.

I am going to give a quick update on enforcement efforts related to the Oculina Bank. We're going to review the actual Oculina Evaluation Plan, Section 3.0, law enforcement; present updated enforcement data for the period of 2007 to 2013; and also provide some recommendations to the Closed Area Evaluation Team.

As part of the plan, these are the overall strategy and efforts. Enforcement Principle 1 was a vessel monitoring system. Principle 2 was cooperative enforcement. Principle 3 was increase enforcement presence. Principle 4 was to report on enforcement; and then 5 was outreach and education efforts.

VMS was to monitor incursions and also to help facilitate interdictions of vessels that were found inside there by VMS; also as a means of intelligence to detect increased fishing activity which might warrant increased patrol activity; planning patrol activities; and then also for investigations.

Obviously, VMS data, as you are well aware, is very important in closed area cases to proving violations. Also it will help to do follow-up inspections and interviews. Cooperative enforcement; obviously with OLE having less than – at that time less than 150 enforcement personnel nationwide, we rely very heavily on our Coast Guard and state partners, in this case, Florida Fish and Wildlife Commission.

They really were the primary patrol assets and NOAA OLE focused on investigations. Also, going back to the intelligence aspect, using VMS and using also contacts with fishers to learn more about fishing activity and patterns in the area. Then also another big component was training our enforcement partners on the regulations. One of the things that was recognized early on, from probably the outset was the need for increased enforcement presence.

How we did that was through surge operations combining Coast Guard, FWC and also law enforcement personnel, really utilizing each agency's assets and personnel, and then also regular patrol activities conducted by the Coast Guard and FWC, either through their vessels, small boats and aircraft.

This is updated information from the last time I gave a presentation, which was I believe a year after the implementation of the plan. You can see there is the primary and secondary for both Coast Guard and for the FWC. Our primary is basically a Coast Guard unit or an FWC patrol vessel is out in the Oculina Bank conducting a fisheries patrol. Secondary would when – for the Coast Guard, if it is an asset on a different mission but inside the area; and then secondary for the FWC would be while the FWC vessel is in transit but available to respond to any incursions.

As you can see, the numbers for Fiscal Year '13 are significantly down. You can see actually a trend where the numbers have gone up and down over the years; but obviously the sequestration and other budgetary impacts have significantly affected the Coast Guard's ability to patrol the area. Then also on the FWC part, their availability of a patrol vessel has been affected by maintenance issues and crew issues.

Those two combined really have made enforcement – having an enforcement presence out on the Oculina Bank difficult as of late. This is actual detections and boardings and it is important to note that obviously when we're out there more often we were detecting more boats;; and you can see where the detections are nil for Fiscal Year '13.

Principle 4 was enforcement reports. As the liaison agent, I collect patrol sightings, boardings and violations. Then I prepare a quarterly report. The report highlights case dispositions, media stories, outreach activities, training and patrol activities; so essentially all activity laws enforcement related to the Oculina Bank. That report will be presented to the South Atlantic Fishery Management Council at each quarterly meeting.

We also are conducting our own outreach and education efforts. Some of these things were for fishing shows, outreach events, on patrol, distributing the rack cards that Kim mentioned; also talking to commercial fishermen and responding to their calls to our office for regulatory information, et cetera.

We also did participate in the outreach and education activities that Kim highlighted and then coordinated with our headquarters for the issue of news releases for oculina enforcement cases and patrol activities. All right, that is basically in a nutshell what the principles were and what enforcement plan was drawn up.

Now I'm going to talk about areas for improvement or areas where we need to maybe perhaps do a better job to make oculina enforcement more effective. Right now VMS is effective; it continues to be effective. We haven't had a rock shrimp trawler incursion or violation, I should say, since 2009.

Any incursions that occur now are usually or almost always a royal red shrimp trawler transiting from the eastern side of the Bank to the western side of the Bank without rock shrimp board; so no violation. We do follow up with those, though, to determine that. Cooperative enforcement; there is really a need to improve patrol coordination between Florida Fish and Wildlife and the Coast Guard. That has been affected by obviously the availability of patrol assets and the lack of hours on the part of the Coast Guard maybe to go out and train or to conduct patrols.

Also increase interagency ride-alongs; we find that to be effective in other areas such as snapper grouper enforcement to really get everybody up to speed on each others patrol asserts and also on the regulations or on the job. Also establish semiannual oculina-specific enforcement meeting and training; we do conduct limited training for some of the Coast Guard units; but it would be much more effective to do that on a regular basis and to get all our enforcement partners into one location to do that.

Obviously, as you can see from the numbers, we need to increase our enforcement presence. One thing that is important to note is that a lot of times when we're out there, it is literally like we're combing the desert; and it is a vast empty ocean that we find. It is hard to have a deterrent enforcement effect when there is nobody out there to deter.

That is something that we need going down to the bottom and starting off with that first; we need to patrol smarter. What I mean by that is if the weather is bad, there is not any reason to be out there. Maybe the most intrepid violator would be out there, but we're essentially wasting gas to comb the desert.

Also something that would be effective is to check ramps and to check marinas prior to going on patrol to see if there are more large trailers to indicate more larger boats that are possibly out there fishing; so more of gathering intelligence before actually going out there to patrol. Right the FWC; they have shifted some of their patrol assets along the coast.

They have a smaller vessel now in Port Canaveral. It is a much faster vessel, but still for that vessel it is an easy 35 to 40 mile run to get to the Experimental Closed Area. That's something that if a local officer down in the Sebastian and Fort Pierce area could do those checks, we might be able to determine whether it's worthwhile to launch the vessel at all.

Also, the idea to utilize covert patrols in conjunction with overt patrols as a way to birddog, so to speak, to have a covert vessel out there and looking at activity, determining possible violations before having a marked vessel come in and do a sweep. Also, one of things specific to the Coast Guard is obtain LMR. LMR stands for living marine resource mission hours or patrol under a secondary mission; the idea of finding a way to manage those hours so that we can still have an asset out on scene on occasion.

Reporting; there is definitely a need for more – and this falls directly on me – timely submission of reports. This isn't our only gig. We have lots of other priorities that we're balancing our time. Basically the Oculina Bank hasn't been on fire lately and so we're not putting water on it, if that makes to sense to everybody.

It is the way of allocating our resources to put out the fires that are raging at the time. That's not an excuse; it just means that we need to do a better job of getting those reports submitted quarterly and not annually. Also identifying better recordkeeping by each source agency; dialing in whether a boarding was actually – whether a vessel was actually sighted inside the area and not outside the area and whether it was boarded inside the area; whether the patrol – how much time the patrol actually spent in the areas.

Those are things that we can dial down and get better information for these reports. Also on outreach, even though our time to actually conduct formal outreach is very limited, we can do a better job in engaging the tournaments in Sebastian and Fort Pierce. They happen annually; it is the same ones. We have done this in the past.

We've given that rack card and they put them in every captain's bag. To a certain extent, we're saturating our audience because these people should probably know that the Oculina Bank is there, but it is an area that we could remind people by including those rack cards during the tournaments.

Usually we use those opportunities to do more pulse operations, especially when snapper grouper species are money fish for those tournaments. Some of the recommendations we have is to take the current Law Enforcement Plan and adapt it to a project management format. We recently did that with our turtle excluder device enforcement.

It is a really much better fit because it establishes the resources, outputs, outcomes, constraints, risk reporting and accountability. It really focuses the efforts more, and so I think it would be a good fit if we adapted the plan to that project management format. Also we need to determine an enforcement burden with the transit provision and maybe come up with some mitigation strategies, things that we can do both before the implementation of that and also in-season to eliminate a lot of excessive patrols or interdictions in response to those transits.

Also it would be a good idea to establish an enforcement expectation that would come down to the outcomes as part of the project management format and maybe develop some sort of compliance metric; you know, whether it is a percentage – we use that right now in our turtle excluder device enforcement based on the rate of violations to the boardings, et cetera, but that is something that we should think about doing going forward. I'll take any questions you have.

MR. JOLLEY: Are you using any drones for surveillance or do you plan to?

MR. CHESLER: No.

DR. DUVAL: That was quick.

MR. CHESLER: Well, if you want to expand on it, there was a drone. The Custom and Border Protection had a drone out of Canaveral with the Coast Guard, and that has been relocated. We never had direct access to that and never even been to their – you know, saw it, but we did get reports from it periodically. There are not any plans for OLE to deploy a drone.

MR. HARTIG: Thanks, Richard, I appreciate that. Is there any way to gauge that some of the violators are using pretty good technology, radar and things, to locate your vessels coming towards them and getting out of an area? Is there any way for you to gauge that based on your radar detections in the area versus leaving?

MR. CHESLER: No; there is not any way for us to do that. There is technology that exists, obviously, as simple as a radar detector; but when you have an 87-foot Coast Guard cutter or a 65-foot Florida FWC patrol vessel, obviously their radar signature is much more significant. If they're bearing down on you at a fairly high rate of speed, it doesn't take too smart of a person to realize that it is a law enforcement assessment. We don't have the ability to counter-detect radar signatures.

MR. HARTIG: You mentioned, well, actually talking to different fishers; actually getting information with them. Is that ongoing; do you still get those kinds of reports from people?

MR. CHESLER: No; that is part of not being on fire. If we don't get complaints about the area, that's probably intentional. There are not any complaints that, hey, I saw a vessel in there or not, so it's really – we don't get any information. What little information we get is about the commercial industry primarily through VMS, and that is really restricted to the rock shrimp fishery.

MR. HARTIG: To me, since 2008, since the economic crash, there haven't been a lot of boats on the ocean, especially out that far. It is not unexpected that you might tone down your enforcement presence based on just the amount of vessels on the water. It is significantly down.

MR. CHESLER: No; that's good; that is something that would be part of our – that project management format is really assessing, okay, what are our patrol needs in that area?

DR. DUVAL: And I think that's a great recommendation to go to that kind of format. I think it's much easier to keep track of what you're actually supposed to be doing and how well you're meeting your targets. Anna.

MS. BECKWITH: Are there any tip lines for folks to call if they were to – you say there are not really any complaints, but are there tip lines? I've got one additional question after that.

MR. CHESLER: Sure, FWC has their law enforcement hotline and we have a hotline as well. That information is actually on the rack cards; it is on the app; it is on the website. It is fairly distributed. Especially the FWC; most people in Florida are aware of that.

MS. BECKWITH: My last question is does OLE use drones for any type of monitoring?

MR. CHESLER: Not right now and not that I'm aware of.

MS. BECKWITH: And is that generally in your experience a less expensive option potentially to consider than actually having your assets go out there and check?

MR. CHESLER: I would say if you were to compare having a Coast Guard C-130 with its flight crew and four turboprop engines, yes, I would say it's a cheaper – but right now they have been tested. I think the National Ocean Service actually has drones, but they're looking at it more of monitoring and not for enforcement. Maybe Acting Special Agent in Charge Otha Easley could answer this better, but we don't have any plans for OLE to acquire drones.

MR. BOWEN: And to Ben's point, we're witnessing the effort up and down the coast since 2008 just dry up, for lack of a better term. You may have presented this and I might have just missed it, but could the chance be that you're receiving 100 percent compliance and nobody is fishing in there?

MR. CHESLER: Yes; I would like to claim that for my performance appraisals. We don't know; that's the problem. If we're not out there, somebody could be out there, so it is hard to determine. It is really hard to gauge whether we have reached a hundred percent compliance. The lack of any violations would point towards that, perhaps, but then again we conducted a patrol and boarded a guy outside the area and he had two red snapper. There are other violations and maybe just not in that area.

MR. HARTIG: Richard, reading through the reports over time, you had violations over time and then violations went down. Of course, like you say, your performance management, whatever that was – I can't remember.

MR. CHESLER: Project management.

MR. HARTIG: But that would tell you that; but to me even still your former enforcement presence has had an impact from the rock shrimp point of view and even from fishermen that I know that were intercepted at some time in the early history of this, so it has worked to some degree.

MR. CHESLER: Right, it has and definitely we can point to the rock shrimp fishery. I think we've achieved compliance with the rock shrimp fishery, but that is a known entity. We know where they're at; we know how many there are.

We don't know how many – really, you know, it points towards more of the recreational sector than anything else. The potential is much higher for violations from the recreational sector and to some extent the commercial sector, the snapper grouper sector. In the Experimental Closed Area we just don't have any way of knowing what that is.

DR. LANEY: Well, it occurs to me, Richard, to ask – and Roger may know the answer to this already, but has OLE considered any sort of buoy monitoring system? I know the Fish and

Wildlife Service is putting bat detectors on buoys offshore now. I know you can use them for detecting birds.

Clearly, we use them for detecting fish that have acoustic transmitters; and it occurs to me that you might be able to put some sort of buoy system out there; that even though you wouldn't be able to visually track a perpetrator, you might be able to at least acoustically assess what sort of numbers of violations you're getting by detecting engine noise or something like that. Is that something you all have considered and do you think it's feasible to do it that way?

MR. CHESLER: I recall going back to prior to the evaluation plan being created that there was some talk about passive acoustic detectors or passive acoustic monitoring, PAMs. I can't remember the name of the – Grant Gilmore; that is who was a proponent of that. The way I see it, though, is the issue with that is that it is a Type 2 MPA.

Vessels can still be in there; they can still troll. They could realistically drift fish for pelagic species; so while we might hear the high pitch and then the stop, which indicate, okay, well, they're, you know – anything short of hearing an anchor bouncing off the bottom, it would probably be – it wouldn't necessarily enhance our ability to enforce the area.

DR. DUVAL: Thank you very much, Agent Chesler. I think if folks have any further questions, they can probably catch him a little bit later. Our next presentation is actually going to be a brief one from Stacey Harter; maybe a little warm-up for tomorrow. Then I'm going to ask Anna to walk us through I think some of the recommendations for the Oculina Evaluation Team and we can provide a little bit of guidance to staff on that.

MS. HARTER: Okay, unfortunately, there is not a lot of new research on the Oculina area to report to you. In fact, we haven't even received any funding to work in this area since 2005. However, in 2011 we had a Deep Sea Coral Cruise that was out there, and they were actually supposed to be setting the Deep Coral HAPC.

However, currents were too strong out there, so we ended up moving the survey further inshore and we did five ROV dives in the oculina area; and that is what I'm going to show you today. Here are the five dives that we did. Two of them were in the OECA at Chapman's Reef and Jeff's Reef; and three of them were north of the HAPC in an area that had not been mapped or charted before. We did mapping surveys at night and ROV surveys during the day.

This is an example of the multibeam imagery that we got from mapping. This is off of the Daytona area; so this is north of the HAPC, and it shows some of these oculina bioherms that we discovered on this cruise. And overlaid this yellow line is the ROV track that we did on that dive. Here is another view of these new oculina bioherms. They're off of Daytona.

It is kind of a zoomed-out view so you can see a lot more of the pinnacles here. This is the slide showing the oculina density for each of the sites; so we have got Chapman's and Jeff's Reef in the OECA; and then the three sites that are north of the HAPC. We have got a count for live oculina density and standing dead oculina density; and there is a range in those columns as well as an average that is in the parentheses.

The last column is an estimated total number of live oculina colonies. If you look at the live oculina density, at the averages, you can see that they're much higher at Chapman's and Jeff's Reef; and that would be expected because it is a protected area. However, if you look at the standing dead, it is fairly comparable between all of the different sites.

In fact, the highest amount of standing dead oculina was found at the Daytona south site, which is north of the HAPC. Then as far as the total number of live colonies go, again very, very abundance in Jeff's and Chapman's Reef; and fairly similar north of the HAPC site. All of this information comes from John Reed at Harbor Branch, who did all of the oculina analysis for these dives.

Here are a few images from the ROV; and these are from the sites that are north of the HAPC. What we saw there were these small live oculina heads. Here is a snowy grouper that is taking shelter on the reef. This picture shows a couple of different size classes of black sea bass. Black sea bass had virtually disappeared from this area for a while; and it appears that they may be starting to come back, which is nice.

Here are a few imagines from the OECA sites. The difference with the oculina in this area is these larger thickets instead of just small coral heads; and another picture of a snowy grouper using the coral reef as habitat. Now for some fish results; this is from all the dives that were north of the HAPC. We've got the fish name listed as well as how many we saw; the dive distance that was covered with the ROV; and then density. All of these listed from high density down to low density.

This species category is a combination of black sea bass and bank sea bass. When the black sea bass are small and you're viewing them on a video tape at a distance, they were very hard to tell apart from the bank sea bass; so we combined them into one category. And then these are the black sea bass and bank bass that we could actually identify down to species.

Anthiids were included in here. They are a combination of the roughtongue bass and the red barbier. All the other species listed here are just a member of the snapper and grouper complex, but the anthiids I also included because of their high abundances and their importance in the ecosystem.

You can see that the highest densities were for the black sea bass, bank sea bass and the anthiids; but we also saw 19 scamp and 14 snowy grouper on those dives. Then this is a summary of the fish from the OECA sites and a little bit different story here. The anthiids are much more in abundance here and the bank sea bass and black sea bass are a little less abundant.

We did see a few more scamp. Their density is a little higher, but the snowy grouper was actually a little bit lower. There are a few other species; a couple of tilefish that were way far in the distance – we could not identify them down to species – a gag grouper and vermilion snapper. That is it as far as new research on the Oculina Bank goes. This acknowledges my funding and where we got ship support and ROV support from.

DR. DUVAL: Are there questions for Stacey regarding the information that she has just presented. Ben.

MR. HARTIG: Stacey, you have participated in research in the past where you have gone into oculina. You have done inside and outside. Your research showed that oculina; there were more groupers I think than there were on inside than outside I think based on – I can't remember it all, but it has been a while.

MS. HARTER: Yes; and that was data based on 2003 and 2005 ROV dives. This is such a few number of dives that I'm showing you data from. It is only two dives in the OECA and three north of the HAPC; so you never know what the densities are doing.

MR. HARTIG: To me it would be much more valuable to look at all the studies that have been done in history. The stuff you have been involved with, on all our MPAs you have got the inside and outside stuff. I didn't see that in any of our information. I've read all those that I've seen; and I read all the cruise reports from this past cruise, which were phenomenal.

There were some really interesting things we saw in some of our MPA with regard to scamp in particular I think. I remember to big aggregations of scamp that you guys documented. To me that all needs to be put together in one area so we can look at all the research that has been done and make an informed judgment about MPAs in general and not just this one study as a defining element for how well we've done with the Experimental Closed Area. You guys have a lot of information.

MS. HARTER: Yes; you're going to get a lot of information tomorrow on the MPAs.

MR. HARTIG: Well, good, okay. Well, that's great.

DR. PONWITH: Ben brings up a really good point. If there is a great deal of information and that information can be assembled, I think it gets back to again if you as a council have some very specific questions in mind, things that you're interested in terms of patterns or decisions that you can foresee having to make in the future, discussing those as we look at today's presentation and tomorrow's presentation and talking them through can help in two different ways.

It can help us evaluate when we do get limited resources to be able to do some monitoring; are we monitoring in a way that is going to tackle that question the very best way. The second is with the data we have in hand, when we assemble it are there specific questions you have; because the way we analyze those data going into the future can be influenced by the types of questions you have. It is just something to keep in the back of your mind as we talk about this and as we look at the presentations today and tomorrow. Your thoughts on those two aspects are valuable going forward.

MR. HARTIG: I think it would be helpful for me to know what the average temperature was on these dives based on what the normal temperature is in the area.

MS. HARTER: I can't tell you off the top of my head, but I do have that data with the temperature.

MR. HARTIG: Yes; if you could get that to us, I didn't expect you to tell me right now.

DR. DUVAL: Are there other comments or questions about the dives or the research? If not, then I'm going to ask Anna if she would please walk us through some of the thoughts that staff have had regarding the Oculina Evaluation Team. They're basically looking for guidance for membership on this team, I believe. While we still have a few minutes before six o'clock, I would like to do that.

MS. MARTIN: Hopefully, this won't take too long. I wanted to point out the current composition of this evaluation team. They are tasked with providing recommendations to the council in 2014. This is a chart I have pulled. It is the same information that is included in Attachment 3B; and that is a three-year evaluation that this evaluation team that you see here – that is when they last convened and provided a recommendation to the council.

We have a wide range of affiliates here. As I mentioned before, I have heard back from a number of them in my initial attempts at reaching out these folks that have been involved in this process before. We have received a good number of interest among the veteran participants; but we do have outreach representatives from FWC that we are looking to identify.

Jennifer Schull will be participating from the Southeast Fisheries Science Center. Research and monitoring representatives: John Reed, who is on the Coral Advisory Panel; Chris Koenig; Grant Gilmore. I won't name all of these folks; but as you can see, I have a yellow highlight here indicating folks we are still trying to reach to gauge their interest in participation. We have recreational representatives, commercial and charter representatives.

All of these folks hail from Florida. Ben Hartig has graciously signed up again to participate; and NGO affiliates as well and law enforcement representatives; so it does run the gamut. We will keep trying to reach these folks. As I mentioned earlier, looking ahead at timing, we're looking to convene the evaluation team in the form of a webinar and kind of go from there if we need to have more than one.

This will be kind of an information update. We need to first convene as a group to determine where we stand and how best to move forward. We do have some recommendations that we wanted to kind of vet through the committee today. As a staff recommendation, we would like to reach out to the Chairs of the Snapper Grouper, Coral, Habitat, Law Enforcement and Deepwater Shrimp APs.

They have not been involved in the previous evaluation team process; and staff thought it might be a good idea to connect with those folks to gauge their interest. We did receive a recommendation from the science center recommending Andy David and Mandy Karnauskas join as agency representatives along with Jennifer Schull.

We just wanted to run those by the committee. Director Bruce Buckson has expressed an interest in participating again and also recommended that we reach out to the point of contact who is in his former position at FWC. We do have some recommendations for folks that would enhance this process. Now I guess would be an opportunity for the committee to provide any guidance that you have at this time for staff to reach out to some folks that may be able to support the evaluation team.

MS. McCAWLEY: I'll work on who the FWC outreach person should be.

DR. DUVAL: Are there any other thoughts or suggestions for staff in terms of reaching out to folks? Personally I think it's a good idea to reach out to the chairs of the APs as staff has recommended. Anna, I don't know if you're looking for something in the form of a motion or just committee consensus.

MS. MARTIN: I think guidance is appropriate at this time. I don't think a motion is warranted unless the committee feels that's appropriate.

DR. DUVAL: So perhaps just guidance from the committee to go ahead and pursue contacting the folks that you've outlined here. Then I think as Jessica has indicated, she will follow up on who the FWC outreach person should be. If there any other thoughts who else might be appropriate for the evaluation team, I think folks can forward those suggestions to staff. Does that sound like a satisfactory way to move forward?

Before we recess for today, the only other item that I just wanted to get out of the way was – and I think this is a question for Monica. We did have in our briefing materials Regulatory Amendment 11 and its appendices should it need to be considered at this meeting; and I was just hoping you might be able to give us confirmation yea or nay whether we're going to need to take that up.

MS. SMIT-BRUNELLO: I don't think you will at this time because we're still waiting on the court's decision.

DR. DUVAL: And that was my assumption but I just wanted that on the record. Mr. Chairman, is there anything else you'd like to say before we recess for the evening and reconvene at 8:30?

MR. HARTIG: I mentioned this I think on our phone call the other day; and I'm not much on conspiracy theories, Monica, but it seems like the judge is holding his or her decision in abeyance based on what we do; is there any validity to that?

MS. SMIT-BRUNELLO: Ben, I have absolutely no idea. I would think it's the court's workload which is determining how quickly she gets her decisions issued. Remember, she is in the D.C. Circuit and they're extremely busy; and I think that they were one of the courts that were down a number of judges. That was an issue that we've probably all heard about within the past couple of weeks. Perhaps they need to add more judges to the bench up there as well; but I'm sure it's a workload issue. That's my best guess.

DR. DUVAL: We will recess until 8:30 tomorrow morning; and we will start with Regulatory Amendment 17.

(Whereupon, the meeting was recessed at 6:00 o'clock p.m., December 3, 2013.)

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened in the Cape Fear Ballroom of the Hilton Wilmington Riverside Hotel, Wilmington, North Carolina, Wednesday morning, December 4, 2013, and was called to order at 8:30 o'clock a.m. by Chairman Michelle Duval.

DR. DUVAL: We have a lot of work to do today so I'm going to go ahead and call the Snapper Grouper Committee Meeting to order. The first thing on our agenda today – and I suspect this will take us at least up to lunch – is Snapper Grouper Regulatory Amendment 17, which is marine protected areas for speckled hind and Warsaw grouper.

If you recall from our last meeting, we asked for a number of presentations on our existing marine protected areas that were implemented with Amendment 14. We have several of those; some presentations on outreach, law enforcement efforts and then a presentation from the science center on the research that has gone on within those MPAs. I think the first thing I want to draw your attention to is Attachment 5A in our briefing book, which is the research, outreach and law enforcement needs. Gregg, I don't know if you just want to say a couple of things about that before Kim goes into her outreach presentation.

MR. WAUGH: You've just received an e-mail or will shortly from Mike Collins that has all of these presentations that have been updated. Some of them are slight changes; some are larger changes, but you have all of that. As Michelle pointed out, we do have included in here Attachment 5A, the list of research, outreach and law enforcement needs from Amendment 14. This gets to the dialogue and the objectives of work that has been mentioned several times. This list is what we were looking for in each of these three categories. As we get these presentations, you want to measure back against how well they have achieved these lists of research needs.

DR. DUVAL: I guess the first presentation is our outreach overview, and I think Kim Iverson is going to take us through that.

MS. IVERSON: I'll try to go a little slower than I did late yesterday afternoon and go back through the outreach efforts for MPAs. I wanted to start back and remind some of the council members that are around the table, reaching back to 1992 and the initial outreach efforts that the council went through in addressing marine protected areas.

They went out to take public comment on the map that you see here with these areas drawn and quickly realized that really wasn't a very good approach. These were areas that had been recommended for consideration as no-take zones; and the public reception was not very favorable. It was considered more of a top-down approach.

The council went back and looked at how they wanted to approach MPAs and decided it would be a bottom-up approach. The new approach was the council formed a Marine Protected Area

Advisory Panel. In 2000 they held a mega advisory panel meeting. I think nearly every advisory panel member that the council had came to that meeting. It was a humongous meeting.

I think it was three days. They had law enforcement, coral, habitat, snapper grouper. I don't remember all of the advisory panels members that were there, but it was quite an undertaking to get input from all of the advisory panel members. Then beginning in 2002 there were a series of stakeholder workshops that were held throughout the southeast.

During the development process, there was a lot of media coverage, news releases were done. I did a series of articles in the Newsletter and the South Atlantic Update. There were a series of public scoping meetings as well as two rounds of public hearings. We had a lot of media coverage and interest in the Deepwater MPAs.

As you know, Amendment 14 was approved and implemented in February 2009. The amendment included an outreach, a research and monitoring and law enforcement component. The outreach component was designed similarly to the Oculina Experimental Closed Area Evaluation Plan; using some of the same objectives that were outlined in the evaluation plan.

Again, the goal was very similar to increase the awareness and understanding of Type 2 MPAs to fishermen, citizens and visitors of central eastern Florida and the U.S. Public. We'll go through the projects that were identified – again very similar to the Oculina Experimental Closed Area – provide regulation information to the fishermen, work with the chart manufacturers, produce news releases and newsletter articles on law enforcement, research and monitoring efforts, the PowerPoint presentations, posters and rack cards and expand the website and to also do television documentaries.

Project 1 was getting the regulations out to fishermen. We partnered with the South Carolina Sea Grant Consortium. Amber was working with for Sea Grant at the time; so we worked closely together to develop the regulations' brochure that I think most of you are familiar with. 40,000 copies were distributed, similar to the SAFMC Fishing Regulations. It is now currently distributed through the council's regulations' app and available for downloading on line.

The publication includes maps of all of the areas, the coordinates, and a brief description of the area and what fisheries are conducted there. Again, we reprinted in 2007 and 2010 the regulations' brochure; and there was a spread on the Deepwater MPAs with the coordinates and maps. As we discussed yesterday, we have the Smartphone app now that has taken the place of the printed regulations' brochure.

If you haven't downloaded the app, I would encourage to do so. There is a postcard out on the front table that tells you how to do that. There is a section on managed areas; and that section includes a downloadable format of the MPA Brochure with all of the maps. We worked again with fishing chart manufacturers similar to the Oculina Experimental Closed Area and the HAPC to better identify the eight Deepwater MPAs; again needing to follow up with the electronic chart manufacturers to see how they're currently identified.

As I mentioned, we had news releases and newsletter articles. This was an article that Stacey Harter, who is going to talk more about the research and monitoring activities, did as a science profile for the Newsletter. Of course, as the MPAs were being developed and the public scoping and public hearings, they were publicized through the Newsletters and articles as well.

Projects 4 and 5 was the PowerPoint presentation and posters and rack cards. Again, the PowerPoint presentation was something that was identified as a low priority by the Outreach Evaluation Team; so we have not done that. It probably would be beneficial, but I think there are some other avenues that we could get the same information out using some social media tools.

The MPA Regulation Brochures were distributed similarly to the rack cards that we currently use for the Oculina Experimental Closed Area. The regulation brochures are larger, so they're not as likely to be seen on a countertop at a bait and tackle store. They do have the rack cards and things like that on racks where they can display those materials.

Of course, the new website is up and running. It includes all of the coordinates, maps, all of the information that is in the printed regulations' brochure. It also includes the latest information on the MPA Expert Workgroup and the workshop that was conducted; the two meetings of the workgroup, all of the briefing book materials. That will continue to be updated as you move through considering MPAs.

TV documentaries were something that had been discussed. I think all of you are familiar with "Revealing the Deep Film" featuring deepwater corals. We have used that to increase awareness of the Deepwater MPAs. The filming and creating a documentary is a little bit cost-prohibitive, and so we want to explore partnerships with other agencies, perhaps, and utilize YouTube and other social media avenues.

At the Snapper Grouper Advisory Panel Meeting last month, we were able to watch a really wonderful example of how YouTube can be utilized to show spawning activity and aggregations in MPAs. Will Heyman gave the Snapper Grouper Advisory Panel that presentation. I think using YouTube we can get that information out without having to go through the cost and effort to do a documentary presentation.

For the summary, most of the objectives here have been addressed. We need to follow up similarly to the Oculina Experimental Closed Area with the electronic chart manufacturing companies; coordinate with the research and monitoring efforts. Stacey is going to be talking about that more and how we can partner with them to get that information out.

I think you'll see that there is a lot of good information there on the research and monitoring activities. We'll work closely with law enforcement from each of the states and our federal partners to get that information out and works towards evaluation on the effectiveness of our outreach efforts. If anybody has any questions; I'll be glad to answer them.

I did want to note a couple of things. I went so quickly yesterday because we were running late. These are things that weren't necessarily addressed as the objectives, but in addition to the items that I noted yesterday for outreach, I did present at the 2008 National Marine Educators

Conference a paper on the Oculina Experimental Closed Area and the management efforts of the council. I partnered with the Smithsonian Marine Station on that.

Then I also participated in the FWC Big Boat Meetings, which is also an awesome way of getting information out on the field officers. All the captains from all the big boats across the state of Florida come together. We met in Ocala. It was an opportunity to get input on the best way for us to get regulation information out to them.

Yesterday I believe Anna noted that Sandra Brooke in 2010 had done a study on surveillance and enforcement of federal fisheries. I participated in the outreach efforts when they had the joint meeting to get input on the best way to get that information out as well. I know we don't deal with hard copies very much; but I do have the book. If anybody is interested, I'll put it on the back table. This is the Teacher Workbook from the 2008 Teacher Workshop.

We don't have this information transferred over to the website yet, but we will. A lot of work went into that. At the time we had interns from the College of Charleston that worked with us on these teacher workshops as part of their masters thesis work. I will have that at the table in the back if you want to flip through and see what we put together.

DR. DUVAL: Kim, the teacher workshop materials are specific to oculina?

MS. IVERSON: They are not specific to oculina but with deepwater corals in general. The teacher workshops were held in conjunction with research and monitoring activities in the Oculina Experimental Closed Area.

DR. DUVAL: I guess I just asked the question because I'm wondering it seems like the materials that you already have would translate really well into something similar for our Deepwater MPAs, similar kinds of educational materials. I just didn't know if that was something that had been brought up.

MS. IVERSON: Stacey and I talked informally yesterday; and I think when you see the research and monitoring activities that are ongoing now in the Deepwater MPAs – the advantage with the Oculina Experimental Closed Area is that it is about 15 miles offshore; so if you want to do something in conjunction with that, we had the media excursions and we were able to actually interact with the scientists on board the ship.

With the MPAs, they're much further offshore so we don't have that opportunity; but we did have port days where we brought in students and the scientists at the dock to talk with the students about the Oculina Experimental Closed Area and HAPC. I think we could do something similar with MPAs and also coordinate with the Teacher At Sea and some of our other federal partners to do the workshop and increase awareness on the Deepwater MPAs.

DR. DUVAL: Are there other questions for Kim regarding outreach activities? If not, thank you very much, and we will move on to our next presentation, which we have a series of law enforcement presentations. I believe the first one is a Coast Guard presentation, Lt. Fowler.

LT. FOWLER: Rich Chesler covered a lot of the things that I wanted to talk about today. In the interest of time, I will not reiterate some of the things that he covered. I want to say yesterday he did mention the boardings and patrols that we've done in the Oculina Bank have reduced dramatically. Sequestration got us off to a really slow start this fiscal year.

We've had a reduction in hours; less assets are being acquired with the cost of and the replacement to the Falcon jet. We're getting about half as many as we originally thought that we were going to. We have had less assets being acquired. We have had a reduction in our hours that we're patrolling.

Because of sequestration, there were changes to dockside and dry dock schedules and deeper level maintenance; so boats that were supposed to have had maintenance done are now having their schedules changed, so we're having to change patrol hours around frequently. Where we thought we would have coverage, we don't.

This uncertainty in hours' allocation; our mission hours are required to be separated mission type. Mr. Chesler covered that yesterday. LMR hours are living marine resource patrol hours. We separate them between SAR and living marine resources hours. There are training hours. We're required to log them as such.

Sometimes when we will be on a training mission; for example, if we're going out for a gunnery exercise we may try and overlap that with a patrol through a marine protected area just to take advantage of the hours that we do have. There is a reluctance to use the LMR hours because no one is really sure how many they're going to have. We haven't released that information yet for District 7.

Right now for District 7, I'm sure you all have read in the news a week or two ago that Haitian freighter that capsized and several people had to be rescued from that. We have been a lot more focused on counter-migrant patrols and counter-drug missions instead of the living marine resources mission.

Another thing that we're dealing with the MPAs, they're pretty far offshore. The only assets that can cover that are fixed-wing assets and our 87- and 110-foot cutters. The smaller patrol boats, we only go about 20 knots; so the MPAs that are 60 and 80 miles offshore, it takes us several hours to get out there. We try and do training and other missions on the way out there and then patrol and then come back, but you're talking eight to ten hours. For a cutter that is only allowed to go eighty or a hundred hours a month, that is a pretty sizable chunk of our mission.

Our hours have been dramatically cut since last year. Last year we were supposed to have almost 7,000 hours for cutters and 1,500 hours for small boats. With sequestration, they were reduced to 4,600 hours for cutters and just over 1,200 for boats. Currently the message is being drafted and routed through our office down at Division 7 to released saying you're only going to have this many hours for this and this many hours for that.

We're still kind of standing by for that come out before anyone is going to do any LMR patrols right now. As I said, transit time to the MPAs takes a large chunk out of the allotted hours.

Aircraft patrols were an option last year. With sequestration, they ended up cutting aircraft hours to 40 for the entire year. This year there are zero hours allotted for living marine resources.

The Southeast Regional Fisheries Training Center had been developing training for aviators to be able to know what they're looking at when they're flying over these MPAs; but they're not going to have any hours to patrol those areas anymore. We will be asking them to do the same thing that the cutters and small boats have been doing; hey, when you guys are out patrolling on maybe an hourly patrol or enroute to a SAR Case taking at least a look out the window and see if there is anyone there and maybe take some pictures if possible.

Major cutters that are coming from other districts like District 1 and District 5 up in New England and Virginia that are patrolling down to the Florida Straits for migrant and counter-drug patrols; we have been asking them to route around these MPAs and try and at least go through them and keep their eyes open.

A lot of the times, also, they're patrolling enroute, they only have a limited number of transit days that they get to go, say, from Boston down to Key West; so they don't have time to do boardings enroute, but they can also take photos and let us know, hey, someone was out fishing in this area or we didn't see anything. That is all that I have. If you have any questions, I'm happy to answer any that you have.

MR. BELL: I was just going to say I know you guys are really strapped and you're doing what I would recommend doing is anytime you can use these sites as waypoints on the way to or from something else, just officer presence is a deterrent sometimes. Just the fact that they see a white cutter go by, that helps, but it's certainly a daunting task given the circumstances and budgets and all.

MR. BOYD: Do you have access to satellite imagery of any kind?

LT. FOWLER: We do have some. On occasion I will get a request from the District 7 Intelligence Office saying, "Hey, we have satellite imagery available if there is a certain area that you want us to look at and concentrate on." But anytime that we have put a request in, we haven't seen anything.

MR. HARTIG: Mel mentioned the visibility. Whenever you can have these training exercises close to an MPA, like where we are it is relatively close and they do have those training exercises fairly close to those, and we don't know what is going on but you're there and just that presence in that area for that period of time gives the fishermen that anticipation that, hey, man, they're enforcing that MPA. Anything like that that could bolster that would help.

DR. DUVAL: Well, I think the take-home message is obviously the Coast Guard is being squeezed just like many other agencies are being squeezed. You have competing priorities and you're having to make those same difficult decisions that other agencies are having to make. It is clear that you're doing everything that you can to try to double up and make the best use of the hours that you do have to try to hit multiple priorities at once. We very much appreciate that.

Are there other questions for Morgan? Thank you very much. I think our next presentation is a joint presentation from NOAA's Office of Law Enforcement and Florida. I believe Otha Easley is going to cover that for us. I believe you did receive an updated Attachment 5D, which is this presentation.

MR. EASLEY: About five weeks ago I received a letter from Executive Director Mahood asking for an enforcement report on MPAs. The council would like to see pretty much what has happened between 2007 when the LEAP provided comment on Deepwater MPAs and today. When I read that, I had three thoughts come to mind. The first one was, darn, I know I shouldn't have missed that last council meeting.

The second was similarly associated with that one and I thought that the LEAP Chair would be the best person for this presentation and not so much NOAA Enforcement. Then my third thought was this presentation could be very short. As a matter of fact, it could be just three slides; the title slide; plus the second slide would be not much change and not much happened; and the third slide would be do you have any questions.

I know you would expect more than that from the LEAP and myself as well. The reason why it would be such a short presentation is because the LEAP back in 2007 stated that Deepwater MPAs that far out and Type 2 are difficult to enforce. They are a challenge for enforcement. That is pretty much the presentation in a nutshell; so if you want to go get some coffee, feel free.

I have expanded that short presentation to about 15 slides. The 15 slides are a refresher of MPAs. I'll just glaze over that since several folks have done that already today. I will refresh your memory on what the 2007 LEAP stated their opinions were on the MPAs then; what the enforcement efforts have been since then; the needs and how progress has or hasn't occurred as far as meeting those needs that were stated back in 2007; and conclusion; and then offer my time to any questions.

The MPAs, Type 2 – for those that probably aren't in this room that didn't know what the four types of MPAs are, I listed those. The MPAs of the deepwater areas are Type 2, which one could arguably say is the most difficult of the four to enforce – as far as enforcement in an enforcement program to have a meaningful deterrence out there.

I will probably come back to that slide later on towards the end. I will just glimpse over these. Morgan with the Coast Guard just mentioned these issues for enforcement and the MPAs as far as their being pretty far out there, so it takes special assets, deepwater vessels, large vessels or patrol craft, especially for the northern MPAs.

The Florida MPAs, they're a little bit closer in and so we expect and have spent more time – I say "we", the states have spent more time out there than the northern MPAs. The 2007 LEAP assessed those and provided an assessment to the council on what their feelings were on the MPAs and rated those high, moderate and low.

What those ratings mean are there. A high rating means that they're easy to get to; and moderate, there is more effort to get out there; and paraphrasing, low is just short of you can't get

there from here, but that is an exaggeration. It just takes an extra effort to get out there to those low-rated MPAs.

In 2007, this summarizes their opinion or their ratings – and I say "their"; the states themselves provided these ratings. NOAA's OLE had little to no input I'm told on these decisions. The LEAP at that time had those ratings there. As of November this year, the LEAP, using the same criteria, had a very similar rating. Note that the LEAP now is a completely different LEAP membership than back then. Maybe one person might be the same, but I might not be correct on that.

NOAA Enforcement's efforts are as you've heard; and I've mentioned a time or two over the years that OLE does not have an enforcement platform to get out there, so we depend on the Coast Guard and the states as far as physically getting out there. We do provide the authority for the states to patrol and enforce the regulations of this council out there, especially for the MPAs.

We also provide the prosecution tools to enforce what the states and Coast Guard come up with as a result of their successful patrols and when cases have been made. Those cases that have come to us since 2007 have only been two, and they're listed here. In 2011 the North Florida MPA – and that was initiated by Florida, FWCC, where a vessel is anchored in the MPA and was in possession of red snapper.

The second was in 2012, a similar situation there, the vessel anchored in that southern Carolina MPA – the northern South Carolina MPA and they were in possession of vermilion snapper. Because of the details of the information that was gathered on that investigation, we had to settle for a written warning on that one. If you want more details, I could share that with you as a sidebar.

Now, each state was consulted as far as exactly what they felt was needed and what their progress has been since 2007 when Amendment 14 and the MPAs were discussed. I want to let you know that this is fully the states' input and nothing from – NOAA OLE had no influence on these numbers here and these opinions.

But what you'll notice – well, I'll start at the top. Florida has had some MPA patrols. Florida has had some success out there and has the assets to dedicate to MPA enforcement. As you see in the slide, 77 patrols and almost 300 vessel hours have been dedicated to MPAs; and their results, four state violations and one federal, and that federal violation was the one I mentioned in the last slide.

The assets needed is pretty much the same as what the 2007 LEAP stated as assets they needed; training, equipment, aircraft; and as far as funding, another vessel and some money for a multi-engine aircraft.

Georgia was asked the same and these are their results. Again, NOAA had no input or influence and nothing to gain from their acquiring additional assets. It's purely for their abilities to get out there to the MPAs. Georgia is more challenged. It is just difficult to get out there; they cannot get out there. They haven't been out there.

Their needs as far as assets and funding are the same as or similar to Florida's, but more notable is pretty much identical to what they were in 2007. South Carolina; they do get out there to the MPAs off their coast; but their accounting system is such that their MPA patrols are mixed in with their other JEA-funded patrols; and so they weren't able to separate MPA-specific patrols out for us.

They do have a 38-foot patrol vessel and that is what they use to get out there. They are making an effort but they've not come up with any citations. According to them, they're funded fine; and if they were to get any additional funding, it wouldn't make a big difference to them because they have many competing priorities. They're doing the best with what they have.

North Carolina; again we not have a Joint Enforcement Agreement with North Carolina; but they still have an MPA off their coast. They do not get out there. They have not reported any citations, of course. Also in 2007, the need is identical to the need in 2013 hasn't changed. As far as funding needs, according to their response, it seemed that they will accept money and assistance from anybody that is willing to help; and I don't blame them.

JEA funding; I want to present to you the quantity of money that has been provided to the states from 2007 to 2013 has not changed much; a slow progression upwards but not significant. Florida you notice is pretty high, but Florida as far as quantity and the spike; the explanation there, Florida has two coasts to deal with plus the Sanctuary and multiple sources of money come funneled through the JEA.

For instance, money directly from National Ocean Service for the Sanctuary comes through the JEA, so that raises their amount. This funding is total for each state. It is not dedicated to MPAs, so I wanted to go ahead and make that clear to you. Assets that the states have; the long-range vessels, two-thirds across the slide are what the states primarily use and some take the chance and go out with some of their mid-range vessels.

For instance, Georgia, their eight mid-range vessels, they use one of those to go out to deeper waters. This is just providing some information for you to think about. This slide here looks pretty busy. It is pretty much a recap of much of the other slides compiled into one; assets that they use, assets that the states need.

The new information is in the blue column, enforcement efforts. I touched on much of that also as far as the number of hours. There are a bunch of zeros and some unknowns. Again, this is information reported by the states; and I'm just compiling it and presenting it to you for the most part. In conclusion, the needs that existed in 2007 still exist today.

There have been no significant additional resources provided to law enforcement; the states as well as NOAA, for that matter. The demand in enforcement services hasn't reduced. Bob this morning said this council alone has had 21 amendments, I believe it is, just this year. Most of the amendments create change or additional restrictions that enforcement has to prioritize and deal with; and I'm not sure that any of them – I would hope that one or two them was a removal of a new regulation or restriction, but I might be stretching on that one.

The last bullet there, the type of MPAs could be could modified since this presentation is providing the information to rethink the MPAs, locations, types, et cetera, hopefully – that other types hopefully could be considered, maybe even combinations of the other types that would make an enforcement program for those MPAs more efficient, more likely.

Because they're Type 2 MPAs with some take allowed, aircraft aren't necessarily favored because the information that we get back still has to be followed up on, because a vessel is still allowed to be out there, they're still allowed to fish in certain fashions. Of course, no-take closures are an enforcement preference; and even if it had to be some take allowed, even reducing the amount of time that we had to deal with a vessel being present in a closed area would be easier to manage our resources as far as narrowing the time where we would have to follow up.

Like I said, for instance, combinations of Type 3 and 4 may be something you can consider; I mean half a year Type 3 and half of the year Type 4. I'm just throwing out some potential possibilities for things to consider. The last three letters on that last slide were near and dear to me, and so don't let me get started on that one. That is an option that I would still like for you to consider some time; though for the most part commercial, maybe even the headboats and charters, but any assistance would help us better manage the MPAs from an enforcement standpoint. Now to that slide where are questions.

DR. DUVAL: Thank you very much, Otha, for that presentation. It was very thorough, and I know that everybody sitting around the table certainly appreciated more than the not much has changed and now we have questions.

I did just want to recognize a special guest that we have here in the audience today; and that is Director Bruce Buckson, who heads up NOAA's Office of Law Enforcement. He is a much-loved figure in Florida and we're very happy to have him here today. We thank you for letting Otha come and be your liaison to this council. Are there questions for Otha about any of the enforcement capabilities or efforts or some of the recommendations from the LEAP? Wilson.

DR. LANEY: I have a question for either you or Otha, I guess, is what is the present status of JEA for North Carolina? Is that still kicking around in the legislature?

DR. DUVAL: I see Pres smiling over there in the corner as well. For folks who are not aware, the issue of a JEA has been a very politically sensitive one in North Carolina for a long time. I think just in the past couple of years we've probably made the most progress that we have. I think it's a distinct possibility at this point. We're trying to work through that.

I think there were simply a couple of miscommunications with our legislative liaison regarding the funding aspect of a JEA. We're hopeful that will be moving forward soon. I know that my boss is going to be here today at some point so you might be able to catch him and get a little bit more detail on where that stands. I know that was an issue that Preston Pate, who is our former Director of Marine Fisheries here in North Carolina, for a long time struggled with that as well. We're keeping our fingers crossed. Zack.

MR. BOWEN: I just wanted to echo that sentiment on those last three letters of that last slide and put that on the record.

MR. EASLEY: Thank you. Hopefully, you will come through when it counts in the future, too.

MR. BOWEN: I just wish I had been on the council last year.

MR. BELL: Sort of piggybacking on both of those, related to JEA we've had a JEA agreement in South Carolina for a while. We have a number of artificial reefs offshore that are classified as Special Management Zones; so that's a big part of what our JEA patrols do are to work those. Then when we brought the MPAs on board, those were just additional sites to visit; and that's where Otha said we don't differentiate – it is a patrol and they go out and cover all of those.

But the obvious thing is these sites off of South Carolina are 50 miles, whatever, offshore. It is a long way and that is why their ability to get out there is very limited. We have got some assets but it's just an overwhelming task to be able to cover those areas. But it does work a lot better in closer; and as you see off of Florida where they're a little bit closer, it is easier to get to the sites and get assets out there.

So the JEA concept does work and it's great. It's just that what we have done with these sites, particularly the ones way offshore, we've taxed resources and capabilities beyond the ability to really do something. That takes us back to thinking outside the box. If you can't get out there conventionally to the degree you need to, we're going to have to at some point embrace different technologies. As Otha stated, VMS is a logical one.

But that's really what you're going to have to do; we're just not going to be able to get officers out there the frequency you would need to and there is going to have to be some reliance on different technologies of some type. We've had even the public that wasn't really enamored with VMS offer suggestions about drones or other types of monitoring systems or something.

But whatever we do use, it has to be incorporated into a system where you can actually make cases that stick. It is not just a simple matter of throwing technology at the problem; it is the right technology that can work within the legal system and all to serve the purpose. But I know whether it is NOAA or Coast Guard or the state agencies, these guys are really trying to do the best they can with what they've got, and it's just an overwhelming task particularly with the ones that are just way offshore.

MR. HARTIG: Thank you, Otha; I appreciate the longer version. There is some interesting information in there about money and times and assets and things that I think we need to know. I was interested in your Type 3 and Type 4; but taking it a little bit farther, maybe mix Type 1 and Type 2 in portions of the year when there aren't a lot of people on the ocean, make them Type 1's, which would help you.

It wouldn't have major impacts on people from North Florida all the way through the Carolinas during the wintertime for the recreational fishery. That may be something that we could talk about, and it would help enforcement and it may help the MPAs overall. The other thing – and

I've brought this up before and you may remember; but to me the recreational fishery, how to get a handle on those people, and to me you could get some kind of asset, fly-over information, if you had a regulation that when a recreational fisherman leaves the dock, if he makes a conscious decision to fish in an MPA, if he wants to troll in an MPA, he cannot have any species in the snapper grouper complex on his vessel that live in those depths.

That would one way to do it. If you flew over an MPA and got a description of that vessel and then never had to send a vessel offshore to investigate and they came back through the inlet and you were able to identify that vessel and you had a smaller vessel, you could intercept that vessel; and if they snapper grouper species, they would be in violation because they trolled in the MPA. To me these MPAs aren't that big.

If you're going to make that decision as a recreational angler, well, I'm going to go bottom fishing later; well, you don't troll in it. That's one way that you could use your flyover assets and then be able to have some check-and-balance system on the recreational fishery in the inlet without ever having to send a boat offshore.

Now you would have to have the flyover. I don't know how difficult it is to get a description of a vessel or a number or anything like that from a flyover; I don't know that. But if you could have that identifier, that is certainly a way that we could move forward with helping you and which would help us in better enforcement of the MPAs on the recreational side.

As a commercial fisherman we see more of the recreational fishery as a problem. We have a lot more to lose. If we go in there and we're cited for being in an MPA, you could lose your permit potentially. That's serious; so we try and stay out of them as much as possible. I don't even like to troll in them. That's just ideas that had come to me during your presentation and one that I've had for a while.

MR. JOLLEY: Ben, that was a pretty interesting thought. I'm curious if you have any idea or any of us have any idea of how much clandestine fishing takes place at times in some of these places; if we have any idea. I know at night might be a most curious time to look; but do we have any idea?

MR. EASLEY: You don't know what you don't know. That kind of puts it in a nutshell. When we're not there, anything could be going on.

MR. JOLLEY: Well, I've never been afraid to ask a dumb question; so I think that belonged there. Has there been any thought about using radar to keep track of maybe the more inshore places? There are some land-based radars up and down our coast in Florida. I would be surprised if we couldn't keep track of a lot of boats at least a modest distance offshore.

MR. EASLEY: Well, the answer to that is similar to – that approaching of using radar is similar to a suggestion yesterday for the oculina and using sonar and that effort. The type of MPAs that these are, vessels are allowed to be there. Radar will see that vessels are out there, but we still have to get out there in some fashion or some form to see what is on board, see what they're

doing, see if they're anchored, are they drifting. In other words, are they contacting the bottom? It is limited use. It is not useless but it is not a panacea, as they say.

MR. HARTIG: Yes; the VMS question, that was difficult for us. There are a number of us that support that; but the council doesn't operate in a vacuum. We have to look at the economic considerations fishermen are facing; and they made very compelling arguments when I read their information; and we didn't do it. What we're hoping is that there will be a new technology that is somewhat cheaper and maybe easier to use come out along the line; that we can use to try and enforce these MPAs. We're not against the idea; it was just we couldn't do at that time.

MR. BELL: I was just going to say the technology you use – I mean there is lots of cool technology, but it has to result in the officer being able to write a hard ticket and for that ticket to hold up in a court of law. That is some of the stuff they struggle with. One other thing that Otha mentioned, and I'm glad he did, is the concept of thinking of other types.

Bringing in the science, if we a had really good sense of where we had spawning aggregations or known aggregations, like some of the stuff we saw that Will presented, if we had that for certain species, then you could look at perhaps smaller areas of time area closures, which could help law enforcement in that you just don't go in there at whatever the appropriate time would be. That is something to keep in mind, but that would be, of course, driven by the science and our ability to understand where these – if there are key spots that exist for spawning for a particular species.

DR. DUVAL: I think we might hear a little bit more about that from our AP Chair as we go through the decision document. Otha, did you want to respond to that?

MR. EASLEY: In general, I'm glad to hear that you're thinking of different types and combining them. I think that will make a difference. I also wanted to say even in a no- take area, enforcement is still needed. It just makes it easier for us. It makes it easier to make those cases when there is no take or the area is completely closed, period, to fishing vessels. If someone is there, then radar could help or sonar, whatever. You're thinking down the right track as far as helping enforcement, and I appreciate that.

MR. PUGLIESE: Just quickly to that, I've raised this a number of times – and I'm going to raise it again at the SECOORA Board Meeting coming up – is the opportunity to really investigate the use of HF Radar. HR Radar is land-based but it can reach out 50 or 70 miles and measuring centimeter wave height area and are building the algorithms to be able to monitor vessels in the Mid-Atlantic Region through the Coast Guard to either replace or supplement their search and rescue operations.

There are some very specific activities to focus that and better connect that into monitoring vessels. It is getting pretty sophisticated where they actually can look at that and look at past tracks of vessels by the waves that it has produced. It is getting to a level that I think what you really are looking at is the opportunity to connect numbers of different technologies; HF Radar, potentially acoustic sound, signatures if you have buoy systems.

I mean with some of the resolutions now they can identify anchors dropping. It is getting good enough – and maybe some of the deployable technologies, maybe not the drones in the sky, but some of the newer small deployable vessels that actually can go out for literally months – you could essentially put those into a system where maybe doing a loop around an MPA area – and groups like Bluefin Robotics and one of the newer technologies that I saw at the last Oceans Meeting had a vessel that was solar and – a combination of solar and wind and potentially deployable up to – and what it's doing is we're getting at the point where as usual with a lot of this, it is drawing on military technology.

They're taking technology from some of the cruise-type missal conditions and build them together so you had somebody with a military background integrating that into usefulness in this and looking for those types of opportunities. I think a combination of these different types of new technologies may actually enhance and do it. There are some specific examples like HF Radar application in the development of the algorithms that are applied very specifically to vessel tracking that we really need to grab with the Mid-Atlantic and at least find out how far they've gone with that.

DR. DUVAL: Thanks for that, Roger; I think that's valuable. If we can ever look to other regions that are trying to do something creative in terms of maximizing enforcement assets, we should be doing that. I know we could probably pepper Otha with a lot more questions, but I think we should probably move on; so, Otha, thank you very much. Our next presentation is going to be from Stacey Harter.

This is the Marine Protected Area Monitoring Program, so Stacey is going to guide us through the different cruises that have occurred in and around the marine protected areas. I believe we have an updated presentation for that as well. It is Attachment 5E, and that was in the bulk download that Mike e-mailed us.

MS. HARTER: We focused our research efforts on five of the MPAs; the Snowy Wreck, northern South Carolina, Edisto, Georgia and Florida MPAs. We've sampled every year from 2004 to 2013 with the exceptions of 2005 and 2011. We have done ROV dives during the day and then mapping at night on our cruises.

The objectives of our surveys were to determine the abundance and distribution of economically important reef fish species and macro benthos in and around the MPAs; to evaluate the habitat of the areas with respect to species composition and abundance as well as geo-morphology; and, finally, to correlate the fishery and habitat data to try to detect trends in fish and invertebrate populations as they protected areas mature.

How did we choose our ROV sites? This will show you the importance of having multibeam maps. In the earlier years of our survey, we really didn't have any mapping to base anything off of, so we went by basic bathymetric charts and then other knowledge that we could get from other researchers. Then each year we have expanded our sampling universe.

In 2011 we acquired a bunch of multibeam maps from George Sedberry and they have been very useful. Then we finally started collecting our own multibeam data in 2012 and 2013 because we

had ship time on the Pisces, which has a multibeam system on it. We've also shared maps with the SEFIS Program out of the NOAA Beaufort Lab.

As many of you know, they are primarily a trapping and camera survey; however, they have done some ROV dives in and around the MPAs; and I'll show you where those are coming up in a little bit. We've also exchanged maps with them. These maps are then used to target hard-bottom reef fish areas. We have tried to sample sites inside and outside of the MPAs each year.

Like I said, it was an ROV survey. We did transects with the ROV. Back at the lab we took our video tapes and analyzed them. All fish were identified and counted. We took notes on habitats such as habitat type, rigosity or complexity, slope and the amount of relief. John Reed joined our project in 2010. He is from Harbor Branch. He expanded our survey to not only include fish populations but also to include macro benthos.

However, today I'm just going to show you fish results; and the fish densities that you'll see are in numbers per kilometer for each dive. That is for hard-bottom habitat only. Any portion of a dive that was sand or soft bottom was not included in the analysis because the target species are not found on that habitat.

An overview of the results; so far we have four years of pre-closure data; 2004 and then 2006 through 2008. We have four years of post-closure data; in 2009, 2010, 2012 and 2013. The 2013 data has not been analyzed yet. We just did that cruise in July. However, while we were out at sea we tried to keep very close count of all the lionfish, snapper, grouper and tilefish.

We tried to count them and identify them while they were out there; and that data is included in this presentation. Over the eight years, we have conducted 168 dives; 71 of them are pre-closure and 97 of them are post-closure. We have mapped 145 kilometer squared in 2012 and 218 kilometer squared in 2013. We have also acquired multibeam maps from other additional sources.

However, portions of the MPAs still are unmapped and we will continue to work on that. I'm going to run through a series of slides just to show you where we have sampled each year. In 2004 we did 31 dives and you can see how they were spread out over the MPAs. In 2006 we did nine dives and they are shown in the green dots.

In 2007 we got 20 dives done; they're in the purple. In 2008 we did 11 dives; they're shown in yellow. In 2009 we did ten dives in the pink. 2010 was the year that the SEFIS Survey also had some ROV dives in and around the MPAs; so they're also shown on this graph. They are in the green dots. Our survey did 17 ROV dives and they are in the orange dots.

2012 and 2013 were by far our best sampling years. We had two full weeks on a NOAA ship; and so we were able to accomplish 37 dives in 2012 and then 33 dives just this past July. You can see we extended our survey a little bit further north of the Snowy Wreck MPA; and that was to try to include some of these proposed areas that have been mentioned.

Now I'm going to go through each MPA. I will start at the Snowy Wreck and work my way south and show you what has been done as far as mapping and the fish populations. Here is the mapping that has been completed at the Snowy Wreck MPA; and the actual wreck itself has also been mapped, and I will show you that in just a bit. Okay, this is actually the old presentation.

Do we have the new one on here? Okay, this is the fish results for the Snowy Wreck MPA. The table reports average densities for each of the species. I need to preface this with saying these are raw densities. They have not been statistically analyzed at this point, so please try not to read too much into the numbers. I just simply wanted to show you the type of data that we're getting from our project and what kinds of patterns and trends we might be starting to see.

These two columns here are before closure densities. The first column is inside the MPA and the second column is outside the MPA. Then these two over here are after closure inside the MPA and outside the MPA. I did make a column here on the end. It says did it increase inside the MPA? This is not statistically significant increase. It simply means that the average density inside the MPA after closure is higher than the inside MPA before closure.

Any species that are in bold are one of the target species of the five grouper and two tilefish species that the MPAs were designed to protect. I've highlighted a couple of interesting things on each fish slide to show you. In the Snowy Wreck we saw eight grouper species and one snapper species.

We saw three of the target species, blueline tilefish, snowy grouper and speckled hind. I think the most interesting and the largest increases after the closure were found in the red porgies and the tomtates. This is the multibeam map of the Snowy Wreck itself. It is about 300 feet long, and you can see the iceberg scours – sorry, not iceberg scours; the sand scours along the shipwreck. I have a video for you and we'll see if it works.

This is a video of the Snowy Wreck MPA that was taken in 2012. I have been told that just a few years ago this wreck had been fished out of snowy grouper, and this is going to show you what it looks like now. As you can see, it has been recolonized by snowy grouper. They're there in very high densities. However, the fish diversity is actually quite low.

There are only about four or five different fish species that we saw on the wreck; and the snowy grouper was the only economically important fish species that was there. Okay, moving on to the northern South Carolina MPA, here is the mapping that we have for this area. This whole area shows the shelf edge; and then this deeper area is quite interesting.

It has these old iceberg scours in it. The scours is all sand, but then on either side of the scour is like these one to three meter relief rock outcrops that have a whole lot of snowy grouper and blueline tilefish on them. Here are our fish results for the northern South Carolina. We saw eleven grouper species and two snapper species; four of the target species, blueline tilefish, snowy grouper, speckled hind and yellowedge grouper.

Three of them have increased inside the MPA. I think the most interesting increases over time have been the gag grouper, the red porgies, snowy grouper increased by a little bit. Tomtates and

vermilions increased quite significantly. Here is the Edisto MPA. Here is the mapping that we have done for it.

The shelf edge seems to be a little bit more broken up and less distinct here; and we focused a lot of our ROV dives on a couple of features here inside the MPA. In 2013 we mapped – this is the artificial reef site and we were asked to map that; and as suspected, there is nothing there right now because nothing has been put down yet.

These are fish results for Edisto. We saw ten grouper species and four snapper species; two of the targets, snowy grouper and speckled hind. Gag grouper showed an increase over time; red porgies, tomtates and vermilion snapper as well. Georgia is unfortunately the area where have the least amount of information and it is because of our lack of mapping for the area, which makes it very difficult to choose ROV dives.

All the mapping that you see here is actually from the SEFIS Program; it is not from our monitoring program. For the fish, we have seen five grouper species and one snapper species; three of the target species, blueline tilefish, snowy grouper and Warsaw. You can see we haven't done any dives inside the MPA after the closure; so this last column here, instead of did it increase inside the MPA, it simply did it increase after closure.

You see we have only seen two species, scamp and snowy grouper, inside the MPA. That is because the Georgia MPA was designed to protect the tilefish, which is mostly sand and muddy habitat. The dives that we have done outside the MPA have been more to the west of there where the shelf edge is; and obviously you see more of the reef fish species there.

The North Florida MPA is completely mapped. These two large mapping areas here are from the Navy and they were nice enough to share these with us. All the other little mapping is what has been done by our program or the SEFIS Program. As far as the fish go, we saw eight grouper species and eight snapper species; three of the target species, snowy grouper, speckled hind and Warsaw.

Some of the most interesting increases are probably the gag grouper, gray snapper outside the MPA, scamp inside the MPA and then vermilion snapper. We all know the lionfish story, about how their densities have increased over time, so I thought I would show you a couple slide of what we've seen from our survey.

I think this is quite interesting. You do see the increase over time, especially in 2009. However, in 2010 it kind of goes back to the levels where it was in 2006 and then again shows a slight increase. Here it is by MPA starting at North Carolina and working our way south to Florida. You see that the lionfish densities are highest off of the two South Carolina MPAs.

So a few conclusions for you; snowy grouper and speckled hind may be showing increases in density inside some of the MPAs. Red porgies, vermilion snapper and tomtate densities appear to have increased inside some of the MPAs. Gag grouper densities appear to have increased inside all the MPA with the exception of Georgia.

The highest snapper density we saw was at the Florida MPA and the highest grouper diversity we saw was at the two South Carolina MPAs. I do want to say that at this point we have only collected four years of post-closure data; and with the target species being such long-lived species, it may take more time for us to realize the full effects that the MPAs may have.

These are my acknowledgments for that part of the survey. I do have a few more slides to show you from a different project, so I'll move on to that. This is on the connectivity of the MPAs. All this information is from George Sedberry and Michelle Meadows. This was a South Carolina DNR Project funded by NMFS Special Programs Office.

What they did was they deployed surface drifters and subsurface drifters. They used MARMAP spawning data to locate gag spawning grounds, which were targeted. Then they deployed the drifters on new and full moon during peak spawning periods in March and April. I just have a few slides to show you their results.

The orange dots are the surface drifters and the blue dots are the subsurface drifters. The star denotes where the drifters were deployed. You can see that this drifter here was deployed in the northern South Carolina MPA, and it eventually connects to the Edisto as well as the Deep Artificial Reef Sites. Drifters here deployed in the Oculina area connect to the North Florida MPA, the Georgia MPA.

Then they go offshore a little bit and come back and hit the Snowy Wreck MPA. It kind of looks like it's in the area of where the wreck itself is. Finally, drifters deployed in Edisto MPA connect to the northern South Carolina and they hit the shallower areas of the Snowy Wreck. That is everything that I have to show you as far as research goes.

DR. DUVAL: Thanks very much for that, Stacey. I'm sure there are probably some questions for Stacey regarding this stuff. One quick question I had, I know that the fish densities are number per kilometer of hard bottom only; and I assume is that averaged over all of your dives? How are those summary numbers put together for the different sites.

MS. HARTER: It is average over all the dives; so I separated it into the before and after inside and outside the closure. It is an average of all the dives that were done.

DR. DUVAL: Throughout all the years?

MS. HARTER: Yes.

MR. BELL: Stacey, that's great. I feel like I have a much better understanding and kind of building from the bottom up with the mapping of what has gone on now. I'm just wondering if the overall intent of this was to kind of focus on just those MPAs, I guess if I were doing this the first thing I might do is try to make sure I had a hundred percent mapping coverage of the existing five boxes or eight boxes, but you were looking at five, before I'd kind of wander out.

I can see the value in mapping and exploring outside there as well, but one thing that would be really nice to have right now would be kind of a complete understanding of what we actually

have drawn a box around; Georgia being a good example. I'm just wondering how we kind of decided where the mapping activities occur versus – and then what would it take, I guess, to complete the mapping of the remaining portions of the boxes we don't have completely mapped.

MS. HARTER: I completely agree with you that it would be great to have the entire MPAs mapped. The larger areas that you saw of the mapping we actually got from George Sedberry; and how they chose where they mapped, I don't know. Where we chose to map, we wanted to hit dives inside and outside the MPA. You can only map so much.

If you remember the North Carolina MPA slide where it showed what the mapping was on that slide, it is these small little areas, and that's where we did our dives. Those are where we chose to do our dives. That is about as much mapping as you can get done in one night. Unfortunately, we can only get so much done on our cruises. We try to get as much done as we can and we try to choose areas that we know hard bottom might exist there.

DR. PONWITH: And just to add to that; that's a really logical question and certainly the ideal goal. But, if you are also interested in the compare and contrast, you need to know what is happening inside that refuge, what is happening outside that refuge, and understanding the topography of both of those by having good maps allows that comparison to be a little bit cleaner. Otherwise, you could be comparing kind of an apple and a cumquat.

The notion of these MPAs is that it is a place that is shielded from fishing; but also if indeed spawning happens there, these fish are in general – I mean, yes, we may have some demersal spawners, but they're not like a chicken where the hen has a nest, the eggs are there and they tend those critters.

There is going to be ultimately – for these broadcast spawners, there is going to be movement of those larvae into the surrounding areas, depending upon how long that larval stage is before they settle out. Having some sort of a notion of what the surrounding habitat looks like as far as its attractiveness for the different life history stages is going to be important as well.

MR. BELL: I fully agree and understand that. I guess my point is that in establishing these areas we have established certain things that can or cannot happen in there; and so we have a stewardship obligation I guess as the managers of these sites. And take to a terrestrial system, if I were a game manager or something and I had a tract of land, I'd want to know how many acres of forest do I have, how many acres of field, how much water.

You'd want to have that foundationally established so you know what you've got to deal with. I guess I'm not criticizing; I just would have started there first I think and establish what have we actually captured in terms of the types of habitat, and then that tells you kind of what you've got potential-wise.

But working outside the area is certainly critical and particularly in the discussion now of perhaps tweaking or twisting or adjusting or adding some size to these. Knowing what is just outside the boundary would be really good to have. I still think there is value in understanding what exactly we have in the existing five boxes.

MR. HAYMANS: Stacey, thank you for the presentation. I just want to make sure I don't put words in your mouth but I understood one of the statements that you made, which was basically that we need more time to study before we understand the full effect of MPAs; you said that, right?

MS. HARTER: Yes.

MR. HAYMANS: So as a followup to that, then if we create more MPAs, all we're going to really do is dilute the finite resources we have now to understand what we've got, right? If we need more time to understand what we have now, creating more is only going to lengthen that time.

DR. PONWITH: I'll tackle that one. If you ask a wealthy person how much money is enough, their answer is always just a little bit more, and scientists are a lot that way with data as well, particularly when you're saying we've done treatment X in one place and treatment Y in the other. We have a place where you can fish and a place where you can't.

What is the response to that? It is a simple question from a statistical standpoint, but it does require a certain amount of data to be able to say with confidence – and you saw a lot of little words like "appear to have" in Stacey's presentation, and that is because you accumulate enough data and then you run the statistical analysis to see if those differences are statistically different. And so you're absolutely right, adding more MPAs without an ability to measure and if you have a measure with the same amount of resources, it could actually weaken your ability to detect differences statistically; but there are other ways of doing that. You can set up an MPA and bin them according to similarities and then sample quite heavily in one area inside and out and use that as a relative index of how those other ones are performing; so there are ways around that. I wouldn't necessarily let that discourage us, but it is absolutely something we need to be cognizant of as decisions are made on this.

MR. HARTIG: The question I asked yesterday; this is what I was looking for, obviously. But having said that, there are a couple of things that are interesting in your work. One of them, as we've gone through this process and talked about the Snowy Wreck, we have looked at that as, hey, maybe we eliminate that and just do this smaller wreck part of it, make it smaller.

But, my gosh, you've got a lot of information, you've got a lot of – working on that western boundary, my gosh, you've got all kinds of cruise information that has gone on for a long period of time. Obviously, there is some habitat in there if you keep going back to those areas.

MS. HARTER: Are you talking about the northern west part of the Snowy Wreck MPA?

MR. HARTIG: Yes, the western part of the Snowy.

MS. HARTER: Yes, that's really where the only hard bottom is in that MPA. The rest of it is all sand. I know we'll get in later about the areas that are being proposed. One thing that was proposed was just to do a smaller shelf-edge area for the Snowy Wreck and then do a smaller

MPA just around the wreck, which I think is logical because there really is a whole lot of sand out there in that MPA other than one corner where there is some hard bottom.

MR. HARTIG: Yes, that was interesting and I appreciated that. The other thing I had was when you do these transects with your ROVs; do you try to replicate the same areas at time so you can go back and look at the same areas that you've looked at previously specific changes for specific spots?

MS. HARTER: Right, we have done some of that where we repeat the same dives year after year so we can see differences. We also try to add on to our sampling universe each year as well.

DR. DUVAL: Before I go to Wilson, Stacey, you showed the video from the Snowy Wreck showing snowy grouper on the Snowy Wreck. Maybe it is just that I have the old presentation, but the inside MPA before closure and inside MPA after closure, it actually shows a decrease in snowy. It was 2.8 inside before and zero after it.

MS. HARTER: Yes, that is because we did one dive on the Snowy Wreck, and that is not included in that chart right there that you're looking at, because we didn't run a transect. It was more of just we went down to the wreck and we were looking to see what was going on. We didn't actually run a transect with it, so it would have been really hard for us to actually figure out what densities were without doing a linear transect.

DR. DUVAL: Thank you for that clarification. Wilson.

DR. LANEY: Hit me if I'm out of line, Madam Chairman, but I'm sitting here thinking about terrestrial analogies for MPAs. One that occurs to me is – and let me preface the comment by saying that I fully recognize the need for documenting the changes in a rigorous scientific statistically valid manner.

But if you think about maybe an analogous situation in a terrestrial environment, there have been lots and lots of vegetation studies that have looked at the impact of whitetail deer, for example, in some of our forests when you have eliminated predators and deer densities get so high. If you throw a fence up around an area that you want to protect from a vegetation perspective, you get a tremendous increase in standing crop and productivity as well of vegetation within that chain link fence.

I think there have been countless studies of MPAs that have been established for long periods of time that show the same sort of response to both the benthicmacro invertebrate communities as well as the fish communities inside those MPAs. The big difference here, of course, is, as we've heard from Otha and the Coast Guard, we don't have such a good way to put a chain link fence around an MPA.

The enforcement issue is certainly there; but from my standpoint anglers are metaphorically equivalent to the whitetail deer. If you preclude angling within an area, you're going to get an increase. We may not be able to see it yet, especially for those species that are long-lived, but it is going to happen and it is an effective tool for the council to use.

DR. DUVAL: We do have another presentation. Marcel and Tracy Smart have a quick presentation from MARMAP regarding our existing MPAs. Ben.

MR. HARTIG: I think I mentioned this a little bit yesterday; but the 2013 cruise reports, I go through your work with a fine-toothed comb trying to search for things that point to we may having success. I think for whatever reason this last cruise report seemed to have a lot more information about some increases we've seen, for scamp in particular that I found very interesting, but that's not incorporated in this.

MS. HARTER: Right; and that is the 2012 report. John Reed joined our project that year and he has got all these access data bases and everything that he can do all that with. That was the first year that we did really a long report like that, so we had much more detail. That was the first year we had a really detailed analysis on it.

MR. HARTIG: I appreciated that; I'd like to go through that.

MS. HARTER: And you will get the same thing. As soon as we're done analyzing the 2013 data, we will do the same kind of report for this year as well.

MR. BELL: I just wanted to go on record thanking somebody. I'm not sure who exactly to thank, but the work that was done by Pisces this summer on our deep reef site, before all we had to go by as far as characterizing the site was just the chart data, but you guys went out there and did that for us and now we're about to actually place material on there in probably the next couple of weeks; and we've got confidence in the type of bottom at least we're placing it on. There are no surprises, anyway, in terms of interesting hard bottom or anything.

MS. HARTER: Yes, and that's great to know that you're going to be placing something on it soon because we get ship time again in June of 2014, and so that is a new place we can go and check after the reefs are put down.

MR. JOLLEY: I enjoyed that. Are you thinking at all in the future of using manned submersibles? There are some new developments or some smaller, cheaper operated things that can be launched off a much smaller boats now.

MS. HARTER: We haven't thought of that. Manned submersibles are a great tool to use. Usually they're quite expensive. Usually the southeast has used the Harbor Branch's Johnson Sea Link; and obviously that is gone at this point. We plan to continue our ROV survey. In fact, we've put in a proposal to expand this survey for three more years at which point we'd have about eight years of post-closure data, which I think would give us a good idea of what is going on. Hopefully, that will get funded and we can continue for a few more years.

DR. DUVAL: Thank you very much, Stacey, and we will be hearing from you again a little bit later regarding some of the additional sites that were recommended by the expert workgroup. Marcel, I don't know if it is you or Tracy who is going to give the presentation, but we have some information from MARMAP.

DR. REICHERT: It is actually both of us. Tracy was responsible for a large part of the analyses, and we are also including information that was provided by SEFIS. The first couple of slides are probably a review of some of the information I or others have presented earlier. MARMAP, SEAMAP-South Atlantic, and SEFIS are collaborating in the Southeast Reef Fish Survey, as it is called now, SERFS -- MARMAP, South Carolina DNR and NOAA in collaboration.

We have been sampling since '72; but we have been using the chevron traps, and it is mostly the data that I'm to be present today since '89. Obviously, a lot of the historical data are from that data set. In 2009 additional funding was available through the SEAMAP-South Atlantic housed at South Carolina DNR in collaboration with NOAA. That is a program that has been in place since 1986, but we started sampling reef fish in 2009.

As you all know, SEFIS came online out of the Southeast Fisheries Science Center in 2010 to complement the reef fish monitoring, and that is when we started using the video surveys. On the left-hand side you see a graph of the area; and in red are all the chevron trap stations currently in our universe. In green are our short-bottom longline stations.

The SERFS chevron trap universe currently consists of well over 3,100 live-bottom stations; mostly over low to moderate relief, because it is difficult deploy traps in areas with high relief. We are currently sampling between 1,300 and 1,500 of those areas each year. Then the MARMAP/SEAMAP Reef Fish Survey is conducting or we have been conducting the short-bottom longline surveys and the long-bottom longline surveys.

The short-bottom longline; we have about 334 stations. We deploy that over moderate to high relief. We used to sample about 200 each year, but the monitoring survey was halted in 2012 as a result of funding reductions. The long-bottom longline survey was specifically designed to sample the tilefish grounds. We sampled using the LORAN blocks or the old LORAN blocks.

As with the short-bottom longline survey, we halted that in 2012 as a result of funding. A quick overview of the gears – you have seen some of these graphs before – the chevron trap, as I mentioned earlier used since '88, but consistent since 1990, and that is what we are using currently as developing an index of relative abundance as a starting year.

What is relevant for the conversation today is that we deploy them to about a depth of 90 meters. On occasion we deploy deeper, but that is generally the deepest areas we deploy traps. We deploy them for about 90 minutes. All traps are baited with menhaden. As I mentioned, we started using still cameras in 2009, but we added the video cameras in 2010.

Now every single trap is equipped with two video cameras, as you can see in the lower right-hand picture, one camera over the entrance of the trap and another camera on the nose of the trap. The short-bottom longline was used since 1987. As I mentioned earlier, we use them in areas of high relief. It used to be called the vertical longline because we draped it over vertical relief. Again for the conversation today, it is important to realize that we generally deploy these short-bottom longlines in depths of over 90 meters.

On the lower right-hand side is a depiction of the short-bottom longline deployment to indicate that we indeed specifically use those over areas if high vertical relief. We bait them with squid. The soak time is the same as the chevron traps, 90 minutes. Obviously, the species that we are targeting are species that are generally found in these areas, such as snowy grouper, jacks, tilefish, speckled hind and others.

Then the long-bottom longline on the lower left-hand side is a graph that shows the LORAN blocks we used to sample. We have a few blocks off of Florida, but generally we are sampling 15 blocks off of South Carolina and Georgia in the fall. Because it is in the fall, on many occasions weather is interrupting our sampling. Our goal is to sample two to four lines per block. We have used this long-bottom longline since 1982 but more consistently since 1996.

It is a hundred hook line. We bait the hooks with squid. They are predominantly or exclusively deployed over the muddy bottom, the tilefish grounds, at around 200 meters or 600 feet. The species obviously that we target are the species off those bottom habitats, such as the golden tilefish and blackbelly rosefish and a few other species.

A couple of remarks I would like to make – and we can discuss this in a little more detail later, but in general the sampling we do in the MPAs, there are a couple of caveats. Obviously, since our sampling strategy is similar to our sampling strategy outside MPAs, there is ongoing sampling mortality associated with our sampling even if we would do just the catch and release.

Because of the depth of the gear deployment, barotrauma usually increases the mortality of the fish we catch. It also means that if we increase the effort for better data – because you have to realize that the reef fish survey was not set up as a monitoring survey for MPAs; so if we want to get better data and increase our efforts, that also means that we will increase the mortality of the fish in the MPAs.

The video index may be a possible alternative, using the videos on the traps or potentially other contraptions. It is a little bit different because it is a static sampling design rather than the moving ROV that Stacey was talking about earlier. A couple of other considerations is how to use the MPA data within the current index development. Are we using them as a regular part of the index or should we treat those data different from the data that we collect outside the MPAs? That is something we need to consider.

Of course, there is a tradeoff between investigating and sampling new areas. If we would want to increase the number of samples in MPAs, there is that tradeoff between that activity and ongoing monitoring efforts given the current funding and effort confounds. We only have so many sea days a year or so much funding; so we need to consider that tradeoff.

Then relative to monitoring efforts and sampling in proposed MPAs, we have collectively a relatively large number of monitoring stations in the majority of the proposed MPAs. That is no surprise because a lot of the proposed MPAs were chosen because of the fact that we had information based on historical MARMAP sampling.

That means that if we are establishing those MPAs, we are losing a number of non-MPA monitoring stations because there is a large number that will now fall within an MPA area. It basically means that historical monitoring stations now become MPA monitoring stations. We need to be very careful in considering how we are going to approach that and what effect that has on the index, because you may not be able to use some of those stations for certain analyses in terms of your index development; so there is a possible effect on the index development.

Then in terms of comparing adjacent areas with current MPAs, we may lose a number of adjacent stations for comparison with current MPAs because now, again, they are becoming MPA stations. I have two examples, the Edisto and the North Florida, where that may be an issue. Let me pause and see if there are any questions relative to this part before I move on to the current MPAs.

MR. HAYMANS: Marcel, you brought up a great point about barotrauma and the mortality associated with the depths, but I had never thought about the fact that you're the – I understand that time and resources are important, but you're the perfect vehicle for testing some of these descending tools. You have got even your chevron traps and the cameras which are already prepared to put them back down and look at South Atlantic species and prove to our anglers that recompression is the tool.

DR. REICHERT: That's interesting. Currently I have a graduate student at the College of Charleston who is specifically going to look at that aspect for a thesis research. Hopefully, in the next year or two she is going to test several descending tools and using video to see how the fish are doing.

That obviously requires additional effort, so there is again that tradeoff between having to spend a little more time in a specific area to investigate that aspect in lieu of dropping another trap set or dropping another couple of lines. We are definitely looking at that and starting to look at that.

MR. HAYMANS: I understand that and that is kind of why I said it; but at the same time anything we can do to improve our bycatch mortality rates helps us all the way around.

DR. REICHERT: I absolutely agree.

MR. BOWEN: Marcel, you were going over the traps and the different lines and baiting with squid and different baits; and I know you're trying to have an index, but has any of that changed over the last couple of years? Your menhaden in your traps; have you always used that bait?

DR. REICHERT: We have mostly used menhaden. The protocol calls for clupeids. There have been years where we have used other clupeids, but –

MR. BOWEN: Well, that being said, wouldn't that kind of, for lack of a better term, mess up the index because you have changed?

DR. REICHERT: I would need to look at that. I would say that we have used predominately menhaden, the same bait for years. Maybe in the initial years of the chevron trap survey we have used different bait, and that is why we are using – the first year of the index is 1990.

Although we have started using the chevron trap since '88, the first two years we have eliminated because there were some changes in the way we deploy traps and the changes we have set up the traps. I can look at that, but I would say at least as long I have been involved in the MARMAP Program we have exclusively used menhaden. We do realize that may change the catchability. For the longlines we have exclusive used squid.

MR. BOWEN: Let me make sure I have this correct. They started in '88 and you changed whatever in 1990, so we threw the first two years out, so that was, for lack of a better term, a waste?

DR. REICHERT: It wasn't waste. At that time we were using Florida traps and blackfish traps; and then for a variety of reason, mostly to increase the species' diversity in the traps, we moved to chevron traps, but it always takes an amount of to develop your standard deployment method. You have to be very careful in the first couple of years to make sure that you develop a method that you can use for a long time.

You're absolutely right, if midway a survey you change the gear, then that changes your catchability; so that's why we used the first two years to develop a method that we felt comfortable with to use for a long time. There are other ways. We have the data; we use data for live history studies; but specifically for the development of an index of relative abundance for stock assessments, we tend to not use those first two years.

MR. BOWEN: And waste was the wrong term; again, the methodology changed so we wouldn't be able to use the first two years.

DR. REICHERT: Yes, there were slight changes in the methodology and we did not feel comfortable adding those as true points in the index; but age composition, life history information, that was information that is actually used in stock assessments. Yes, I should probably have clarified it a little better.

MR. BELL: It just hit me we've got to keep in mind that MARMAP's purpose is not to specifically just go monitor MPAs. MARMAP serves a major important role on a large scale, and we wouldn't want to do things to detract from your larger mission. I'm wondering if it is something kick around at some point if there are ways we could add on – I'm not looking for additional work for you to do, but you mentioned somehow being able to go down and establish an index of sites where we're just doing camera.

It is not a trap-mounted camera where we're taking animals, but we're just going down there looking; and I'm thinking similarly to what we did in some of the shallow water stuff where we went down and did video transects or we did point counts and those sorts of things. It wouldn't be too terribly expensive I would think to kind of add on some additional camera work somehow

or partner with the states somehow for additional capabilities to – because you guys have the technology and the capability and knowledge right now.

Maybe it's something we can talk about; but it seemed to me if we could establish a system of actual index stations within the MPAs where we're doing just camera work, it could be added on or added to something without a major draw on assets. But whatever we do, I'm very sensitive to the fact that we don't want to detract from your overall mission and capabilities.

DR. REICHERT: I think there are ways to deploy the traps in a way we are deploying them now but not catch any fish; and that means that the data that we get from the video are consistent with the other video data that we get during our regular sampling season, so you can actually compare the information rather than start yet another index.

That is very important and that is what we're currently thinking of and talking about with our partners to see how we can potentially do that. Again, there is that tradeoff between what we currently do and if we are increasing our efforts in MPAs, then something has got to give, assuming level funding. That is some of the caveats.

MR. BELL: If you can figure out how to trap lionfish only or something on these sites with a camera, that would be great.

DR. REICHERT: We haven't been very successful, but I think there is a new trap method out that they're trying in Florida. I think it has to do with the fact that we do not use live bait and we may not be sampling in the time of day that lionfish are most active, but we are catching them in increasing numbers.

DR. DUVAL: All right, I think we're ready to move on and let Marcel go through the information on the current MPAs.

DR. REICHERT: In general, three of the current MPAs we would not expect any sampling. They're either too far south for our current sampling coverage; and one is the Deepwater South Carolina MPA, which doesn't have any live-bottom habitat in it. The Georgia MPA is the soft-bottom tilefish grounds and we have been sampling there with our long-bottom longline.

The four remaining MPAs we have used both chevron trap and short-bottom longline with various densities of stations in those areas. We have both current sampling and pre-MPA sampling. We also have sampling inside the MPA and in areas roughly within 15 nautical miles for comparison of data within and outside the MPAs.

The most data we have are from the Snowy Grouper Wreck, North and South Carolina, Edisto and North Florida. In this data overview I present data through 2012. We present data for a limited number of species, but we have other species available. What I have done is since the numbers of deployments are relatively low, I have used a simple – or Tracy has used a simple nominal CPUE either in fish per trap, hour or fish per hook hour.

The graph on the left-hand side is the same you saw before, but this time in purple, if it is visible, the current MPAs. This is a general overview of our sampling efforts: Snowy Wreck, seven stations in our current universe and fourteen short-bottom longline stations. But as you can see, the North and South Carolina, Edisto and Florida, we have our most significant sampling efforts to date.

The 2013 sampling station universe is 86, 89 and 36 for those MPAs, respectively. You can see that the short-bottom longline coverage is relatively minor; eight, six and one. That is because we had planned to increase our short-bottom longline activities over the years in the MPAs, but we stopped our monitoring efforts in 2012.

The purplish ones in the graph here are the sampling areas that we would not expect to have any samples from using our chevron trap and our short-bottom longline gear. The North Carolina current MPA, the Snowy Grouper Wreck, we have very little – actually no historical data inside the MPA. Since 2009 we added seven stations.

We are still planning on adding more stations in the Snowy Grouper Wreck. Generally our catches with the chevron trap have been relatively low. As for the short-bottom longline station, we only had one historical station in there. We added 14 stations and we were planning on adding some more.

We expect to have some data available in future years not only using the catches but also from the video surveys. We do have some comparison for outside the MPA although they are relatively far away relative to some of the other areas. The closest outside the MPA clusters for chevron trap stations is about 15 nautical miles and for short-bottom longline it is about 11 nautical miles. We can do some comparison if that is needed.

South Carolina current MPAs, the Deepwater MPA we have no known live-bottom habitat, but we hope to be able to go out there in the next week or so prior to deployment. It kind of depends on the weather to see if we can do some video surveys there to verify further the bottom that was talked about earlier.

The northern South Carolina MPA, we have both historical and current stations available for comparison both for chevron traps and short-bottom longline. Both also have adjacent station clusters that we can use. The graph on the right indicates the northern South Carolina MPA again in red. In all the graphs the red is our chevron trap stations and the green dots are short-bottom longline stations.

The red box is the chevron stations or other stations that Tracy has used for comparison inside and outside the MPAs. The stations for these areas, what we have seen are typical catches for the Deepwater Continental Shelf and shelf-edge areas. The distance between the comparison and MPA is about 13 nautical miles for chevron traps and about five nautical miles for short-bottom longline.

These are some graphs and I want you to notice the error bars. They are plus or minus one standard error. All these graphs have the similar structure. In purple are the catches; and that is

on the vertical axis in number per trap hour or number per hook hour. In red are the comparative areas or the data from the areas that we can compare that with outside the MPAs.

There is an arrow for the year the MPAs were established. The N's under the graph are the number of traps deployed each year; and as you can see we were able to increase the number of traps a little bit over the years inside the MPAs. This is the graph for red grouper. It is not a clear pattern especially if you look at the standard error; but what is significant is that we had very, very low catches; indeed no catches near this MPAs

This is a similar graph for snowy grouper. Again, the structure of the graph is the same. We have generally seen an increase in the snowy grouper appearances both in our chevron traps and in the few short-bottom longline deployments that we were able to make over the last couple of years.

The next graph is scamp and what is interesting – but again the variability in our catches is relatively high, but what is interesting is that our data showed that we caught a little more scamp outside the MPAs than inside the MPAs; but again the number of traps deployed that these data were based on is relatively low.

Vermilion snapper catches have varied over the years. I don't believe there is a statistical difference between areas within the MPA, again in purple and near the MPA in red. Red porgy in the northern South Carolina MPA, the patterns have generally been the same. We have seen an increase in red porgy densities over the last few years; and that pattern was clear in the MPAs – or in the northern South Carolina MPA.

Just to provide a quick difference between the chevron trap graphs and the short-bottom longline graphs; the chevron traps are line graphs; the short-bottom longline graphs, as you can see here, are bar graphs; and in the solid purple line is the snowy grouper. The hashed line is the blueline tilefish.

This is the northern South Carolina. We had a couple more lines in the MPA, but two lines is not particularly a reliable data source so we are hoping that in the future we can increase the number of lines and the effort in this MPA. Edisto, the same general setup; in red is the area that we have used for comparison, and it is fortunately much closer to the MPA than in some of the other areas we have.

Again, we have both historical and current stations available for chevron trap and short-bottom longline. Short-bottom longline, again relatively low numbers – we have samples for 2008 but no catches for snapper and groupers. In general we have had historically low catches of snapper groupers in the earlier years. We have no sampling since the establishment of the MPA.

These are some graphs again with the same structure; from the chevron traps, purple within the MPA; red outside the MPA. This is for scamp. We found higher numbers of scamp in the MPA in recent years, but again our number of traps in the MPA is still relatively low. The good thing is that we have consistently sampled the Edisto MPA over the years. Here is vermilion snapper;

a similar pattern as in the other MPA with a high variability and not really a significant difference inside and outside the MPA.

Red porgy; this is somewhat a different pattern than the northern South Carolina MPA where we found consistently higher red porgy densities inside the MPA than outside the MPA; but that was a pattern that was more or less the same prior to the establishment of the MPAs. I'm not sure if that's a function of the habitat that we are comparing rather than the establishment of the MPA, the no fishing.

The Georgia MPA, as I mentioned earlier, is golden tilefish. This graph shows the blocks that I mentioned earlier overlaid over the MPAs. You see that there are two blocks or almost three blocks that are overlapping with the MPA; so we have some data and some comparison from just outside the MPA.

This is the data for the golden tilefish, which is our most important target species for this long-bottom longline. You can see that prior to or at the beginning of the establishment the densities were a little higher. I would say that given the variability and the low number of lines in the MPA, it is not possible to determine whether densities are higher or lower inside and outside the MPA.

Florida current MPAs; we have both information for the North Florida MPA; and the remaining, as I said earlier, were too far south to be covered by our sampling in the area. Again, like the other MPAs we have some comparison just outside the MPA, about eight nautical miles for chevron traps, and unfortunately there is not a lot of sampling for short-bottom longline in the southern area to begin with.

As you can see, we only have a very limited number of short-bottom longline stations in the North Florida MPA. Again, the structure of the graph is the same with the red is the area that we used as a comparison and purple is the MPA area. Speckled hind; over the years our speckled hind catches have always been very low as you can see by the large error bars here.

We have a decent number of chevron trap sites in the North Florida MPA, but I couldn't tell you whether the densities of speckled hind are lower or higher within the MPA and outside. Snowy grouper; I would say the same remark. As you can see, we have increased our efforts in the MPA. This is mostly due to SEFIS efforts in the area, but a high variability in snowy grouper catches makes it difficult to make any conclusions relative to densities inside and outside the MPA.

Vermilion snapper; in 2012 outside the MPA we had relatively low numbers. That may have something to do with what Ben mentioned earlier; the cold water intrusion and when we are in the area to sample, but that is something we have look into in terms of a comparison of our catches with our oceanographic information.

Red porgy; a general pattern of slowly increasing catches in the last couple of years; and because it's one of our more abundance species, the error bars are generally a little lower. It seems to indicate that the catches within the MPA seemed to be a little higher than outside the MPA,

which was not the case prior to establishment of the MPA given these data. The short-bottom longline survey; again, this is the bar graph, very low numbers. We sampled six lines in 2010 with very little data otherwise. This is the data on red porgy. With that, I think the next part is going to be later.

DR. DUVAL: I think if anyone has any questions for Marcel right now, we will take those and then after that we're going to move into a little bit of discussion regarding our existing MPAs. I know that Director Buckson had asked to come to the table and just say a few things I think once the questions on Marcel's presentation are over. Are there questions for Marcel? Ben.

MR. HARTIG: First, the red porgy stuff, I had reservations about not going ahead with that benchmark assessment; but since we've seen these increases over the last couple of years now, we saw a bump in that one year. This sampling seems to indicate at least in this presentation that there is an increase in red porgy trends in your sampling.

DR REICHERT: Yes, keep in mind that these are very specific areas that we have analyzed; so this may not be indicative of the overall densities of red porgy. We are currently analyzing the 2013 data; and we have that available for a presentation in 2014 if the council is interested in getting another update on our CPUE.

MR. HARTIG: And one more thing, if I may, the Warsaws you caught this year; were either one of those caught in an MPA.

DR. REICHERT: I don't believe so. Tracy.

MS. SMART: I don't think so.

DR. REICHERT: Yes, I don't believe so; I think they were outside the MPA.

MR. CONKLIN: Marcel, you said your sampling is from very specific areas. I just want to get a better understanding of where you're sampling. Being fishery-independent data; are you dropping these traps right on these structures and rocks or are you just driving around and throwing them wherever? I just want to be clear on that.

DR. REICHERT: I understand that. Our universe, as we call it, the total number of stations we have were established either using video, reconnaissance traps, information from commercial and recreational fishermen and other information. Then we went to those areas, sampled and we established either by using video, underwater television, still cameras or trap catches – if we established that was indeed live-bottom habitat, we add them to our universe.

The same procedure was followed by the SEFIS Program when they added their stations and when they came online. That is what we are using. Our random sampling; at the beginning of a sampling season we select a random number of stations from our known universe; so it is not that we are randomly selecting a spot in the ocean where we go sample.

We are specifically sampling live-bottom habitat. As a sampling design, what you ideally do is that true random sampling; but because of the large amount of sand habitat, that would be waste of resources. What we are doing now is a compromise. It is a random selection of our established stations, but it is not a random selection of any spot in the ocean. Does that answer your question?

MR. CONKLIN: Yes; so when you get down to these random selections in these specific areas; how do you determine – you know, how do these coordinates come up or do you guys just pick random coordinates even if it's within the specific area that may or may not – I mean because you know as well as I do that live bottom, you can be a couple hundred feet off of it and not catch anything. I was just wondering if you're dropping it right on the structure or it is just sometimes the hammer hits the nail on the head kind of thing.

DR. REICHERT: We are trying to drop the trap as close as possible to the lat/long of the established station. Now, currently because we have the videos and earlier the still cameras, we use that to verify bottom habitat. That information is currently used in the development of an index as a correction for our sampling efforts. Does that answer your question?

MR. CONKLIN: Yes, thank you.

DR. LANEY: Marcel, I noticed that in two of the three red porgy graphs that you showed us, two of them seemed to track pretty well both inside and outside of the MPA. I was wondering if is that an indication that red porgy is perhaps more of a habitat generalist as opposed to some of the other species. The corollary followup to that then would be I wondered if it is as good a species perhaps to track changes inside the MPA as some of the other species that are more reef dependent may be.

DR. REICHERT: Yes, that could be. Tracy is currently looking at a more broader species composition inside and out, so hopefully we will have a better answer to those questions in the near future. That is good point you're making in terms of tracking how well an MPA functions perhaps it is good to look at certain species but then also look at the entire species composition in terms of what specific groups or species are actually utilizing these MPAs. That is a complex question.

DR. DUVAL: Are there any other questions for Marcel before we move on? If not, I would like to ask Director Buckson if he would mind coming to the table and giving us the benefit of some of his wisdom.

DIRECTOR BUCKSON: Madam Chair, I appreciate the time to be able to just make a couple of comments. I apologize for not being more relevant with the presentation with the enforcement. I was a little delayed in having my thoughts together and I apologize for that. I do have some left over candy from Halloween and they happen to be Smarties, so I'm going to be okay.

I appreciate the approach the council has taken to reviewing these MPAs. I think it's hugely valuable for enforcement primarily because we believe that we're part of the management

process and not just the endgame. I think this council has really demonstrated that well. I appreciate being able to provide some overview on the enforcement perspective.

I appreciated hearing Kim's comments about when this started. It made be a reflective to know that I sat through most of those meetings back in 2000 and prior to that; and they did a great job of putting those together as well. I also appreciated hearing the Coast Guard's comments about budget and considerations there. I think that's something that we all have to take into consideration and realize that does cause us to be at a place where there really is no change in how the enforcement ends up with these MPAs; and I think that was a good point that Otha made during his presentation as well.

I will say that for us partnerships are critical so we look forward to those JEAs, the partnerships with the states. We also look forward to our partnership with the Coast Guard. We're a relatively small agency. I think one of the things we did back in 2000 and 2007 from an enforcement prospective was to try to give the council the benefit of having a clear set of expectations on what enforcement was going to be able to do with regard to the MPAs.

That became one of the things that I stressed over and over again that here are the expectations. If you're building something and your expectation is up here but we can only produce here, we're going to under-produce and we're going to be a failure. We wanted to make sure that those expectations were set and clearly set; and I think we're in the same place that we were then and we are now and making sure that those expectations are set.

I just thought this was a good opportunity for me to just give a quick overview of my office and especially with regard to creating new regulations. This probably tactically is not something that enforcement agencies often do, but I think that for this council's benefit and for the general public it is important information.

We're a nation-wide organization. We have about a hundred special agents nationwide and twenty-eight enforcement officers, less than 130 staff as we approach all of these different regulations on the federal side. We are the subject matter expert when it comes to the federal fisheries' regulations. We are the only agency that is fully dedicated to federal fisheries.

Our partners have multiple missions. You heard the Coast Guard mention their multiple missions. We are the ones that are dedicated to the federal fisheries' enforcement; and that is why we rely on partnerships so much. Our JEA partnerships and the dollars that go there – and I expect I'll have some questions from Ben about some of that.

He looked closely at those graphs and I appreciate the fact that you did; but again for this council's benefit there are 27 states and territories that we have partnerships with. Over the years we have had a range between $14 million and $18 million that we disburse to those partners for enforcement efforts.

I have a commitment from our leadership that is a program that no one wants to see go away. As far as the budget goes, there is a strong push to make sure that stays level, that it is not one of

these that during sequester and other potential fiscal issues that the federal government goes through, that is not one in NOAA Fisheries that anybody wants to see decrease.

From that perspective, I would say that level funding is the new increase when it comes to the fiscal budget within the federal government. I'm really happy about that from our perspective. I think all of the presentations really from the enforcement perspective did a good job of explaining where we are and what our capabilities are.

Absent any magic with regard to budget, I don't expect that to change. From this council's benefit, again setting those expectations I don't expect that you will see an increased ability to do enforcement in MPAs that are a far distance from shore, and that continues to be a challenge for us. There was some discussion – I made several notes – some discussion about alternatives, other methods to possibly view activities in those areas.

We have been doing some in the background; no good information at this point, but we are always considering other options. As Otha pointed out, VMS is one of those options, but there is probably other information that is out there. Whether or not it is real time and it is any better than VMS, I don't believe we're going to see that, but it might at least give us the ability to better plan our enforcement activities, so that's the kind of thing that we're looking at that may be a little bit different.

As I sat here and I was thinking back, okay, since 2000 – and obviously we were involved in this since before 2000, but since 2000 that's 13 years and we sit here as an enforcement group – and it is an enforcement group; it is not just the Office of Law Enforcement – telling you that nothing has changed.

We still can't do probably what you want us to do; and that is a little disappointing for me, but I think that is something that is a stark reality that we all have to face as we begin to continue to look at these regulations for MPAs either increasing or decreasing or doing something with them. If you make them just understand that it is not like the baseball ball; if you make it, we may not come.

It is a bit different than the adage that if you build it they will come. We will try but not necessarily be able to be there. That is all I really wanted to follow up with, and I appreciate it. I know you've got a busy day ahead of you, and I apologize for not being a little more appropriate on my timing with the comments. Thank you, Madam Chair.

DR. DUVAL: No apologies whatsoever and we very much appreciate the benefit of the perspective that you have nationally as to how it relates to the activities that we're considering here at the council level. Are there any quick questions for the director? Ben.

MR. HARTIG: Just a thanks; thanks for coming and thanks for taking the time to come down here. With your involvement in this over the years, it was specifically important for you to weigh in on the law enforcement side. I really appreciate the frank presentations we've gotten from law enforcement. I think that's critical, and that's really what we need to know going into

the future with the budgets. I think your quote about level funding is the new increase; I think that is appropriate. Thanks.

MR. COX: Bruce, I have quick question for you. In relation to other parts of the country; how effective is VMS in situations like this?

DIRECTOR BUCKSON: It is a critical element that we use in the Pacific. It is one of those pieces of equipment that our office is incapable of doing some of the monitoring that needs to be done. We do that with VMS obviously in conjunction again with the Coast Guard out there, so it is a critical item when you get to the Pacific simply because of the vastness.

In the other areas that we use it, we've got it throughout the nation, obviously, it is also one of those huge benefits. It is a good tool. Our enforcement program consists of not only my office but our general counsel enforcement section. Our general counsel folks would tell you that it is not by itself in most cases going to be able to make a case, so there is still followup that has – it is not magic tool, but it is a very valuable tool.

DR. LANEY: I will just follow up on Jack's comment and say that if you can't build the chain link fence around the vegetation plot, putting a collar on the deer is the next best thing. I think the VMS again is the analogy there.

DR. DUVAL: The point is well taken, Wilson, and thank you so much for being here and for making those comments. We really appreciate with you having such a busy schedule that you have and having the history that you have with our existing marine protected areas, we appreciate the benefit of what you had to say.

DIRECTOR BUCKSON: It is always nice to come to what I consider home. I'm actually going to be here today and most of tomorrow so I'll have the opportunity to be around for a while.

DR. DUVAL: Great; we appreciate that. Before we get into some committee guidance to staff on our existing MPAs, I did want to really quickly take the opportunity to recognize someone else who is in the room, and that is my boss, Dr. Louis Daniel, who is someone that is well know to many people around this table. Dr. Daniel is here today and I know he wanted to say a few things to folks around the table. I will also point out that he is the newly elected chair of the Atlantic States Maine Fisheries Commission.

DR. DANIEL: I'm going to be quick, Madam Chairman. You scare me here and at home. (Laughter) She has done a spectacular job for me and I thank her publicly for that. I know I'm in good hands with her being here. This is my alma mater. I had to take a minute to just remember for just a second Russ Nelson.

Russ and I had some knockdown drag-outs before Roy got here. Roy took Russ' place in the knockdown drag-outs. He was sort of my mentor and he represented the state of Florida with a lot of class. He was a tough opponent. I remember Russ vividly and around this table, and I will miss him particularly. I know there are a few folks around the table that remember Russ sitting

around the table. I think David Cupka was here. Welcome to North Carolina. You have got a lot of hard work to do today, so I'll leave it with that.

DR. DUVAL: Thank you very much for that, Boss, I appreciate it. Now comes the part where we give some guidance to staff in terms of the degree to which the needs have been met and what remains and how we would like staff to proceed. I referred to Attachment 5A, I believe, at the beginning of our conversation, which was just a review of I think the research, outreach and law enforcement needs, and that was as of July 2007 document. Gregg has got that displayed here on the screen.

Just recall that at our last committee meeting we directed staff to move forward with the development of a system management plan. Gregg, I don't know if you can give us sort of an update on where that stands, but that might be helpful for the committee as we move forward.

MR. WAUGH: That is an activity for 2014, so we are making plans. You will see that when we get to Executive Finance; that is in the rankings. That is certainly a place where we can have a group go through and more meticulously look at what has been done and what is left. I might just mention that Anna covered the proposed coral grant; and that is an increased amount from what we received the last time around. If we get that, that should complete the mapping of the Oculina Experimental Closed Area as well as continue some of the work that Stacey and those have been doing.

I don't know of any other funding besides MARMAP and SEFIS ongoing work. I don't know if Bonnie has any other ideas on where we can get some more work focused on these areas. Perhaps developing that system management plan would be a place for a group to systematically determine what has been met and where the shortfalls are and bring that back to you.

DR. DUVAL: I think we're looking for some input from the committee guidance to staff. We have received a number of presentations regarding what has occurred within the protected areas thus far that we have established. Clearly, there are needs all around I think just in terms of law enforcement.

I think maybe not as much with regard to outreach in terms of some of those activities. There certainly is always more opportunity for outreach; but then also the science in terms of what is being inside and outside the MPAs. Mel has brought up a couple of points with regard to mapping and knowing what you have in the areas that we already have inside versus outside. I'm just looking for a little bit of input and guidance to staff. Mel.

MR. BELL: You can tell me if I'm overly focused on this, but I think one of the things we ought to try to do is achieve a hundred percent mapping of what we currently have boxed in for regulatory purposes. I understand the value in being outside the boxes as well, but I don't particularly like what the Georgia site – I mean we know very little. I think about what is in the box because we haven't been in the box.

I would establish that as a priority somehow in terms of additional mapping to the degree we can control assets or direct assets or whatever. I would definitely think we should get in there and try

to complete the mapping. Maybe somebody has this, but I don't know what percent is still left for each site that needs to be done.

I don't again have a sense of what would that really take of a particular platform, how many boat hours or boat days are we talking about and how long would it take to actually complete that. I think that is a good place for one thing to definitely focus on would be trying to complete the mapping of the existing sites. And potentially if you're going to be outside the box, if you can be kind of along the edge there, which would be a potential direction to expand in, maybe some there, but I'd definitely finish inside the boxes.

DR. DUVAL: Yes, I agree; and I think trying to partner wherever possible. I know Roger mentioned some of the information that we've gotten from the Navy's efforts with regard to mapping. I think we have a representative from the Navy on our Habitat and Environmental Protection AP, Carter Watterson, and so I believe he is well aware of some of these needs, but perhaps Roger can speak more directly to that.

MR. PUGLIESE: And I think those fit together very well; and I mentioned before about how far the Navy has gone. One of the things I think will be really good is to be able to look at how they characterized the total system. I think mapping is one thing; but then to get to the characterization because I think what we really ultimately want to be able to do is look at these areas as a functional system of hard bottom, soft bottom, coral, the whole system, how they're used for forage, how they're used for settlement, all that type of a broader characterization. I think they got a little closer to that with that comprehensive view that the Navy took when they did that larger area. We have some real opportunity to build on that.

MR. BELL: To that, logically if you have a platform out there mapping, it is probably capable of carrying an ROV or a camera or something so you can do some groundtruthing of what you've done, so those two things could occur to some degree simultaneously.

MR. PHILLIPS: I know there are snowies in that Georgia MPA. I'm sitting here and blew up the Atlas Map and the inside line is running 40 or 50 fathoms. I'm sure there are some of snapper grouper species other than the snowies and golden tile in there; but again we've never looked so we don't know. It would really be nice to know what is on those inshore lines on the edge of that MPA.

DR. DUVAL: And I think just looking at, well, a couple of things; first of all, I think the system management plan is going to identify more specifically once staff has the opportunity to work on that things like metrics that we have talked about that could be used to really try to measure what has gone on within these MPAs. I think Bob wants to say something to that.

MR. MAHOOD: I know Stacey is sitting over there going I wish I could get up there and say something; and we work very closely. Anna interacts very closely with Stacey and the folks down there in the planning of the funding we get through our Coral Grant Program. The money that is supposed to go to the councils for coral work, we now work with the center as opposed to independent universities; and we're just getting such a bigger bang for our buck doing that.

We do have a lot of back and forth of what they will try to accomplish; but when you're talking about platforms and things, Mel, to me it is kind of like our meeting schedule. We get the first full week in December and we kind of carve that out and nobody else tries to jump into that time slot for meetings and things.

They're pretty well locked into a time period for vessels and platforms. I know we talked this year about doing things at different times of the year maybe to look at some different parameters. Ben came up with some ideas that maybe we should look at these areas when the fish might be there; when they not be there when they're out there. In talking with them, I think you're pretty well locked into a timeframe for NOAA vessels. Those things are scheduled well in advance, I understand.

DR. PONWITH: Just to that point, the '14 schedule is carved in stone with the exception of if we take cuts. When the CR expires and they give us either another CR or a budget, they can cut. The changes other than reducing surveys for '14, those decisions were made a long time ago. The FY-15 plan is there in draft in review right now and decisions are being made.

If the council has input on changes of timing or changes in area, engaging in those discussions early enough so that we can actually filter that input to the people who are responsible for representing us in planning those ship days at sea is very, very beneficial.

DR. LANEY: Mr. Chairman, this is not a paid commercial advertisement, but I will point out that we do have a vessel asset that was going to be lost, which now is docked right outside the hotel here, in the form of the Research Vessel Cape Hatteras and it is available. I have talked to Jason Rogers, who runs that program, and they do have new charter rates that they've put out there now. The key component as always is getting the funding to provide for the operation of the vessel, but that is an asset that the council may want to consider being available at some point in time.

MR. BELL: I understand the vessel ops schedules and that sort of thing and how they're planned out in advance. I guess if we can look for opportunities where we can piggyback – and I guess I'm spoiled because this summer I simply asked through George's help if the Pisces could help us out and go cover the deep site and, boom, they did it. I'm thinking, wow, that was easy.

But any time we can take an available opportunity to ask something that we can go in this area; yes, your mission is over here but if you're transiting through, if we can kind of keep filling in the gaps and the blanks as we go, I think that will help. I know these things are planned out and I know how that is all scheduled or the process within NOAA and how they schedule where their assets are going and what they're doing.

I think we could maybe just try to work that a little bit harder, and then there may be – I don't know what other assets are out there; but it would be great if we could talk to the Navy or talk to other institutions or something. I would like to just fill in the gaps in terms of our understanding of what we've actually already achieved.

MR. MAHOOD: That's a good suggestion, Mel. Actually the grant we're entering into next year is for three years; so when we worked with Stacey and her crowd down there we really planned out and they planned out for three years what work they're going to do. You're right, we have that ability to look ahead now.

It will be probably the next three-year period, but I believe they're still doing work within the MPAs. Anna works directly with them and I trust her to make sure that they're doing it; and Gregg has a lot of input it also. That is something we can look at relative to filling out the areas; and by the end of this three-year period we should have a pretty good idea of what has not been covered out there. We appreciate your folks down there, Bonnie, and working with them.

Believe me, they're a lot easier to work with than some of the universities we used to work with. How it works is we don't get the funding and then turn around and give it back to Bonnie and their folks. That's illegal. We agree up front that those dollars that would normally come to the South Atlantic Council go directly to the Southeast Fisheries Science Center. We used to get that funding and then contract with various universities to do the work, and, man, that was horrible, but we appreciate Stacey and all them and the work they do down there.

DR. DUVAL: We definitely appreciate Stacey, too. Thank you very much for that presentation and we're looking forward to more. I would like to be able to finish this little conversation here and take a break before we get into Regulatory Amendment 17. I think there has been a lot of good input that staff could take to move forward and incorporate into the system management plan. Roger.

MR. PUGLIESE: Just a quick note; I think one of the things – I've talked to Bonnie and talked to Marcel – is a real opportunity is to enhance some of the – and coupled to some of the ongoing activities – potentially providing some assets that would enhance when they're doing work offshore, tow fish, opportunities as they're going out to add in some of the mapping capabilities in the areas or some of the environmental monitoring.

I think there are some opportunities to get some of those different types – even potentially an ROV that while they drop the trap down, they could actually run them along the ledge lines. I mean, there are ways that we can I think build on existing activities by just providing some of the resources.

Again, I've been trying to pursue those through some of our other collaborations with the Observing Group, et cetera. I think that is going to be real vessels of opportunity to be able to begin to fill in these where we do have that limitation. And to go even beyond what Bob said about the vessels, at the Oceans '13 Meeting the NOAA Director of Research very pointedly presented the fact that we're looking at very significant reductions in vessel times. As an agency they're looking to technology down the road to really accomplish activities, and it is only going to continue to be reduced.

MR. HARTIG: There has been a lot of discussing about platforms. I think we're looking more towards the science side of NOAA. Fishermen platforms, Mel, absolutely, I mean we have

fishermen that want to participate more and more in these types of needs. Now, we have had these discussions in the past; you know, how does a fisherman fit into a long-time survey.

Maybe he gets to a point at some time where he doesn't want to participate; but still I think you could do this with a number of vessels on call at certain times and have this where you do that. Now, you can answer specific questions, which CRPs are used more frequently to do, like the spawning aggregation question.

We have got NOAA ship time and we can only use it in one period of time, so let's put an ROV on a commercial vessel during the spawning times and get out there and look and see what is happening in these MPAs during that time. That is relatively easy compared to trying to commandeer ship time from NOAA and change the schedule.

It is just the way government works doesn't work as well to deal with these time-sensitive things that we want to change to. Number one, I think you need to do a cost-benefit analysis of what you're doing with your survey now. Number two, try and set up a system and maybe bring the commercial fishermen in where you could get people that wanted to do a long-term monitoring project and commit to it and then see how all that works. To me we've got to start looking outside of NOAA to try and answer some of these questions.

DR. DUVAL: And we've talked about this, certainly, within data collection and about cooperative monitoring and using fishermen as platforms, and Marcel is nodding his head in the back. He has had conversations with people about trying to replace those short-bottom longline surveys, et cetera. We have a January through April spawning closure where, gosh, wouldn't it be great to get some of the headboats that aren't running during that time of year as a cooperative platform. Mel and then John; and if we can wrap this up, that would be great.

MR. BELL: Following up on that, the place where fishermen could be really useful in this I think would be a layer up from what I was talking about, which would be some of the establishing index sites for video work or something where we're looking to fish. There are a lot of fishing boats that could deploy a camera or deploy a trap/camera system or something and simply recover it and then the data is loaded into a computer or whatever.

That is a real good way, perhaps, of involving fishing platforms in collecting the video data. With the mapping stuff, I understand NOAA is maxed out but here is one of my analogies here. We've got these eight yards that we have grass in. We've cut the grass in a percentage of those yards, but there is grass that needs to be cut.

Who has got lawnmowers, who can help us cut the grass? In underwater survey work and mapping like that, it's like cutting the grass. You just back and forth and back and forth, and it takes time, but it is, of course, sophisticated platforms. So it's how much grass is left to cut and who out there could possibly help us cut this grass and how long will that take to get it cut? I don't know that you cut rely on the fishermen necessarily for the mapping-type stuff, but certainly for the video-type indexing work they can certainly deploy a trap, deploy a camera, recover it. That would be a really good idea.

MR. JOLLEY: I just want to ditto what Mel and Ben have said, and I would give you the example. In the 1970's all of my research was done on private vessels. I think we're overlooking private enterprise; not just the fishermen themselves but anybody who has got a big boat. I can remember how much we got done, whether it was sonic tracking sailfish or whether it was plankton tows or whether it was tagging and releasing fish. Let's don't overlook private enterprise.

DR. DUVAL: Duly noted. If we can go ahead and take a ten-minute break and let staff kind of change out to get into the next part of our discussion, we will come back and get as much as we can done before lunch.

DR. DUVAL: I'm going to ask Gregg to start just briefly walking us through the decision document for Regulatory Amendment 17. There are some places where we need to provide some input but what we really need to focus on is walking through the information on the new sites. We will start with North Carolina and just work our way down, but just really quickly I want to turn things over to Gregg just to kind of walk us through the components of the scoping document.

MS. McCAWLEY: What attachment is this?

MR. WAUGH: 5F; and this was in the second briefing book and has not changed since. It hasn't been sent around four times. It is 5F, Snapper Grouper Regulatory 17, scoping document. We using this format because the direction you gave us was to prepare this for scoping; and it is in our typical format for scoping documents. Some of this material will be changed before we go out to scoping. In terms of background, we've got your direction from the March and September meetings that lay out how we structure the document, the four actions. We are careful to make clear when we're talking about Type 2 MPAs.

Then you get into a need for action, and this lays out the history, management, stock assessments, the bycatch levels, and we've also got figures at the end. Then what we've plugged in here for right now in quite a bit of detail is the Snapper Grouper AP recommendations. We will certainly, in the scoping document, show what the AP has recommended, but perhaps not in this level of detail.

On the bottom of Page 5, they had a number of questions and/or points. Then as Michelle indicated, when we cycle back to come through and talk about purpose and need and how we measure impacts and so forth, we'll go through the AP's motions. Robert is here to elaborate on those as well.

I mentioned the purpose and need and how we measure impacts; and then we've got the actions. These have been structured as per your direction, moving from North Carolina southward. The way you asked us to look at them was no action first – and that's always Alternative 1 – then Alternative 2 is to modify through reconfiguration. Alternative 3 would be sites based on documented occurrence; and then 4 is documented spawning.

In any case where there is no evidence of spawning or occurrence, then we're proposing to strike those. For example, North Carolina, none of the sites proposed for establishment have documented spawning of speckled hind and/or Warsaw grouper; so that would be dropped from the list. That same format is carried out.

Then we've got two charts for each one; one showing the bottom depth and then another chart or two showing the individual sites with the information, if we have it, showing spawning speckled hind and spawning Warsaw grouper, point observations of speckled hind and Warsaw grouper and the depth contours, to help show you better how these sites were chosen. Then that repeats for each one.

Then towards the end we've got the proposed timing. We've got the tables that you saw before and then the scoping meetings that are already scheduled. We've got scoping and hearings for several different items, so those dates and locations are set. Then we've got those charts that show – okay, it's in the PDF Version that you – the charts that show what the bycatch figures are. That's it.

DR. DUVAL: I think what we want to do next is really just start in the north and work our way south and go through the presentations that we have. There are some brief presentations that Stacey is going to give us on each site and that Marcel is going to give us on each site and that Dr. George Sedberry is also going to give us on each site; for each state basically recaps of the expert workgroup recommendations, the MARMAP/SEFIS/SERFS information that we have and the science center dives or information that they have within each of these MPAs.

Attachment 5G is the state-specific presentations. It is in a folder in your briefing book, so there is one for each state. We will start with that. Stacey will give us the review of the North Carolina sites for scoping, and then I believe the SERFS presentation is still the same one. It is just Part 2 of what we reviewed earlier, and that is Attachment 5H. Attachment 5I is the MPA Expert Workgroup recommendations. I am going to turn things over to Stacey to run us through North Carolina.

MS. HARTER: Okay, all the results that I'm showing you for all these states come from the same MPA Survey that I just reported on. The methods are the same. It is all ROV work and such. Nine sites have been proposed by the workgroup; and so far we have surveyed in five of them. They're shown in the blue. The ones in black we have not surveyed yet. The one in red is your existing MPA, the Snowy Wreck.

I am going to start at the north and work my way down. The most northern one that we've surveyed is the 780 Bottom shown here. This is the mapping that we have covered in 2013. Some of these have depth range on them so you can see that the depth change here is from about 66 meters down to about 96 meters in the blue.

We did three dives on various features of the multibeam in 2013. Please keep in mind that the 2013 tapes have not been analyzed yet; so the only species that I have to report on are the snapper grouper, tilefish and lionfish that we tried to keep track of as we were on the cruise. Here are a few pictures of what the bottom looked like.

We saw mostly low-relief rock outcrops, about a meter or less and some pavement. We have a nice picture of a scamp there, a few gray triggerfish, some live bottom, black coral. There is lionfish everywhere. Okay, as far as the fish go in the 780 Bottom, the most abundant species we saw was the lionfish. These are all listed from the highest density down to the lowest density. We also saw five scamp, three red grouper, one rock hind and two blueline tilefish on our dives there.

Now moving on to the North Cape Lookout, the next one further south, this is the mapping that we did there in 2013. We chose to map a little bit outside the MPA because we saw some interesting features on the bathymetric charts, and they did show up in multibeam maps. The depth here is a little bigger, steeper drop-off.

The red is about 53 meters and it goes down to about 147 meters. We did three dives on features of the multibeam in 2013. Here are a few pictures of the bottom. This was really nice high relief; about 30 to 40 meters relief overall; however, it wasn't steep a drop-off. It was more of just a gradual decline; maybe a 10 to 20 degree slope.

We saw quite a few small live oculina heads, large schools of these anthiids, which are most roughtongue bass. Lionfish, of course, were abundance and then our target species up here, the speckled hind. Here are the fish results. Again, all these are from highest density to lowest density. Lionfish and scamp were quite abundant. We did see one speckled hind, one gag grouper, one blueline tilefish and one yellowmouth grouper.

In the North Cape Lookout 2, here is the area that we mapped. The depth changes from 72 meters in the red down to 120 meters in the blue. We did one dive there in 2013. The pictures don't really show this very well, but the habitat was very similar to the North Cape Lookout proposed area.

It was about a 30 meter relief; but a gradual slope and not a steep drop-off. There just wasn't a lot of fish there. For how good the habitat was, we didn't see the densities of fish that we thought we were going to. Again, this was a 2013 dive, so I don't have a full species list, but we did see five lionfish and two scamp.

And finally is the southern North Carolina mapping area, the one that intersects with the existing MPA. We've mapped two areas of that proposed area; and we did it at two different times so they have two different changes in depth. This one over here is from 50 meters down to 133; and this one ranges from 71 meters down to 100.

We've done ten dives over the years. In 2004 we did four dives; 2007, two dives; 2012, three dives; and one in 2013. Here are a few pictures of what the bottom looked like. It was mostly low-relief ledge, about one to two meters in relief. Again, we saw live oculina heads there. This kind of shows the rock habitat a little bit more, some cobia underneath there and a nice picture of a scamp.

Here is the species list that we saw. The most abundant species were the tomtate, vermilion snapper and greater amberjack. We did see seventeen snowy grouper; one speckled hind, our

target species; and you can look over the list of all the other fish species that we saw. I believe that's everything I have for North Carolina.

DR. DUVAL: Are there any quick questions for Stacey before we move into Marcel's information? Chris.

MR. CONKLIN: I just had a question on how long did those dives last?

MS. HARTER: We aim for about two hours on average. Sometimes they're a little bit less; sometimes they're a little bit more than that. It all depends on what the habitat looks like when we're down there. If we've got some really nice habitat, we will stay on it for longer. Otherwise, we'll call the dive short.

MR. COX: Did you guys look at the Malchace at all?

MS. HARTER: We did not, no.

MR. HARTIG: Do you have the capability of measuring any of these fish as you do these transects?

MS. HARTER: We do have lasers on the ROVs that are spaced ten centimeters apart; so as long as the fish comes into the view of those lasers, we do have the ability to extrapolate that and to estimate size.

MR. HARTIG: That one speckled hind picture; he looked like he was being pretty photogenic. Do you have a measurement on that animal?

MS. HARTER: I'd have to go back to the video and look.

DR. DUVAL: Are there any other questions for Stacey right now? Marcel.

DR. REICHERT: This is a brief overview mostly of the numbers of samples we have in each of these areas. We currently do not have the fish densities and species composition analyzed but we are working on that or Tracy and her colleagues are working on that. This is an overviewed of the proposed MPAs in North Carolina.

As with the previous graphs, you will see here in red where our current chevron trap stations are located; and the green dots are where our current long-bottom longline stations are located. I want to remind you, as you can in this graph as well as some of the graphs in the next slides during my presentation for the proposed MPAs in all the states, is that a relatively large number of our current stations are within the proposed MPAs.

I want to remind you of the possible consequences that may have for our surveys, so we need to keep that in the back of our minds. Of North Carolina, this is the overview of what historic chevron trap samples we have, what current chevron traps sample we have, and the same for the short-bottom longline.

As you see in the gray bar, most of our samples currently are from the short-bottom longline, but we are currently not doing any monitoring using the short-bottom longline. The bottom line is that we have relatively limited coverage for the chevron trip and no historic comparisons for the chevron, but we do have some historic information for the short-bottom longline.

This is another depiction of what we have available. This bar graph; the different colored bars represent the different years that we potentially have samples. The number of stations that we have samples for are on the X-axis and on the Y-axis are the various MPAs. The one that is outlined in purple is the current established Snowy Grouper MPA.

In general, chevron trap survey data is relatively limited. We have a little better coverage using the short-bottom longline survey. Again, the structure of these graphs are the same with the different colored bars representing different time periods of our sampling. That was it for North Carolina.

MR. HAYMANS: Marcel, just reading something into what you said; would you elaborate on – you made a comment about a number of your sampling stations were within proposed MPAs, and that sort of sounded like a negative kind of – what did you mean by that?

DR. REICHERT: Well, maybe you remember in my previous presentation, I mentioned the fact that there are some consequences of establishing these MPAs because at that point our regular monitoring stations become MPA stations. In that respect in terms of an index you may have to consider to treat them differently than your regular monitoring stations. That was one of them.

Maybe you remember that the other consequence was that we are currently using some of these areas as a comparison with how the fish composition and densities look like inside and outside the MPA. If you now are going to encompass them in another MPA, then we may lose the ability in some of these areas to make that comparison. Those were some of the things that you may want to keep in the back of your mind in terms of establishing the MPAs. There are probably analytical ways to treat that, but there are some consequences of that for our monitoring efforts.

DR. DUVAL: Are there any other questions for Marcel? Okay, George.

DR. SEDBERRY: Okay, I'm going to present the data and the process and recommendations that the expert working group made. As you'll recall, the expert working group was composed of scientists and fishermen, and they met twice to look at all the existing data that were available for the region in terms of habitat and capture locations for speckled hind and Warsaw grouper and spawning locations for those two species.

We considered all the available data, point observations. From that, Nick Farmer developed the spatial classification model, which basically overlaid the point observations of speckled hind and Warsaw grouper over existing habitat data. Then he developed a geographical distribution model, which looked at more of the catch-per-unit effort type data and refined some of the habitat data to try to be able to predict where these two species might occur just based on habitat data.

Nick also looked at the protection per square kilometer, how much habitat and what percent of the stock of these two species would be protected in the proposed MPAs. We looked at documented spawning, data from the MARMAP Program and connectivity from drifter studies that were shown earlier and then also looked at co-occurring species and what the impacts of the protected areas might be on fisheries for other species.

I don't want to go into all the details of this because we really wanted to look at state by state what the recommendations were, but I feel like I have to give you a little bit of background just so you'll know how we got where we are. The data sources are listed here. I'm not going to go into them in detail, but you can see that they're fishery-dependent and fishery-independent data, rely heavily on headboat indices or headboat logbooks, commercial logbooks, MARMAP data base, some submersible dives and various other sources of occurrence of these two species.

Okay, the point observations are shown here by data base, where the data came from and these are actual points where these fish were caught. As you can see, the red symbols there, the X's and pluses are headboat data, and they're reported by the headboat grids, so they're not very accurate. But data sources like MARMAP and submersible observations have really pinpointed the locations of where these two species occur.

The spatial classification model to which overlay the point occurrences on top of the habitat data indicated that these species are generally found at the shelf-edge reef, 30 to 40 fathoms. It is hard to see on these maps, but the deep red areas are high-concentration areas for the two species. Yellow is kind of intermediate and green is absent or low concentrations.

Generally, through the geographic distribution model that Nick developed it is seen that speckled hind abundance is higher, indicated by the red colors, to the north and that Warsaw grouper abundance and densities is higher to the south; again the same scale, red densities being higher. Nick also looked at the percent of the habitat based on all the habitat data we had, the SEAMAP bottom classification, any additional sonar data we had, what percent of that habitat would be protected by all the proposed and Amendment 14 MPAs and then was percent of the stock would be protected by those.

If you were here on Monday for the Data Workshop, Mike presented that spreadsheet and how these calculations were made. Again, I don't want to go into the details, but they're available in the publication by Nick and in the spreadsheet that is part of your briefing book for the Data Workshop. I think it is attachment 4. Again, we also looked at connectivity. During the workgroup meetings we had some drifter data that Stacey referred to earlier. These are all the drifter tracks, these blue lines, and it's really hard to see.

What Nick did was using GIS created a density layer where these drifters were retained in the region, and these kind of red shapes in this retention zone map here show where water masses are retained on relation to spawning locations. The existing Amendment 14 MPAs and the proposed MPAs are really connected by the Gulf Stream; and then there are a series of gyres that come of the Gulf Stream that actually can retain water masses over some of those sites so that spawning that occurs there might be retained there.

The impacts on associated stocks; again I don't want to go into the details here, but we did look at if these areas are closed to protect Warsaw grouper and speckled hind, what are the impacts going to be on fisheries for other species. I'll present that state by state. This is what the maps will look like; you know, from less than 1 percent impact on associated stocks to 4 to 5 percent or up to 7 to 8 percent in the case of Warsaw grouper – what the potential impact would be on landings of associated species like red porgy and greater amberjack.

In considering the MPAs, we looked at many areas and made recommendations about some of them. The criteria we settled on were does the location contain high numbers of one or both of the species, is it an area of high bycatch of these species. We really wanted to target areas where they occur and where bycatch is high because the idea behind the MPAs is to reduce the bycatch.

Can the site be designed to reduce socio-economic impact based on the co-occurring species; does the site contain potential spawning locations – and again most that information came from MARMAP – is there connectivity among the sites; is it possible that spawning in one site could positively influence recruitment in another; and are the sites spaced out along that shelf-edge reef to allow for fishing areas in between them.

As I go through those state-by-state maps, the point observations that I mentioned earlier, the blue polygons are Warsaw grouper; the red ones are speckled hind. They're overlain on the base map of depth data from the National Geophysical Data Center plus any multibeam or other high-resolution depth data that we had.

We included locations of wrecks and artificial reefs because, as we have seen, some of these wrecks contain these two species. We will just go through them one by one. For the North Carolina sites, again these are the sites we have seen on the maps that Stacey and Marcel have shown, the Malchace Wreck; the 780 Bottom; South Cape Lookout; a reconfiguration of snowy grouper, southern North Carolina and then down to northern South Carolina.

The point data for the occurrence for the occurrence of the two species are shown in this figure. We had considered something called the Manuelo Wreck. We were a little confused about where Malchace really was, but we straightened that out. The buoy symbol here indicates where the wreck actually is. Again, we're seeing X's and pluses where the locations of the two species are.

The red symbols here indicate capture of the two species from headboat logbook date, but the logbook grid is not very precise so we don't have a lot of confidence in where these are collected. The other symbols are generally from MARMAP and their point locations that have good location data. We can see in, for example, the 780 Bottom we have bottom mapping that Stacey showed; we have catch locations for speckled hind.

In the North Cape Lookout location we have catch locations for speckled hind and for Warsaw grouper. As you can see as we go through this state by state, some of these areas seem to be better than others. We looked at the Malchace Wreck and recommended that based on fishermen observations and to avoid some very popular recreational and commercial fishing sites. The 780 Bottom was also recommended by fishermen as a potential site as well.

Moving southward and some of the sites; this is kind of a continuous shelf-edge reef that goes from North Carolina down to Florida. Again, we looked at the spawning locations, point observations for the two species. As you can see in some of these areas, we have very high point occurrences of speckled hind and Warsaw grouper; much less for Warsaw grouper, but many for speckled hind.

But again some of these are very popular fishing locations; and so the recommendation was made for the South Cape Lookout MPA. This is the same boxes shown on the previous slide, but with MARMAP spawning locations.

These are not spawning locations for speckled hind and Warsaw grouper. These two species are pretty rare and not commonly sampled by MARMAP; so there are even fewer gonad samples from those samples from those two species. We looked at other spawning locations for other reef fish that are associated with the two groupers because many of these reef fish spawn in the same location because of the bottom morphology and the hydrographic conditions are conducive are spawning so that we used it.

As a proxy for spawning for speckled hind and Warsaw grouper, we looked at spawning locations for many other reef fish species. As you can see in the recommended South Cape Lookout MPA, there is a lot of spawning that occurs there, so it is likely that it would protect spawning Warsaw grouper and speckled hind as well.

Then the existing Snowy Wreck here is the green box. The expert working group recommended shrinking that to encompass just the Snowy Wreck and some area around it where additional material might be deposited in the future to enhance the Snowy Wreck. Part of the existing Snowy Wreck MPA did include some natural bottom and some point locations for speckled hind, and we want to include that as well.

The expert working group is proposing a second southern North Carolina MPA to capture those locations that were in the existing Snowy Wreck MPA and some additional ones as well to the southwest. The impacts on associated species – so, again, if you look at the scale down here in the lower right, you see the impact on associated snapper grouper landings from less than 1 percent to 4 and 5 percent.

Some of the suggestions have very little impact on existing fisheries, but in some cases it is a little bit higher. Looking at the headboat logbook data, it is the same kind of interpretation of the map in that the blue is low impact and red is high impact. The suggested areas will have low to no predicted impact on headboat catches.

This table is a very complicated table. It is from the spreadsheet that is Attachment 4 in the data workshop session from Monday that you can look at in detail; but it shows for each of those sites what its size is, whether Warsaw grouper and speckled hind are spawning there or if it's likely spawning because there are many snapper grouper species that spawn there, what the effect of the closure would be as a percentage of the habitat for these two species, what its conservation benefit would be for protecting a percentage of the stock.

We have that for both species based on two different models. We also have the impact on the associated species; and again the details of this are in that spreadsheet. And just to look at it in a more graphic form, we can see that, for example, the different colors here show different species, the predicted impact on landings of those different species and kind of the width of the bar giving an indication of what the impact of this closure might be on associated species. That's it for North Carolina.

DR. DUVAL: Are there any questions for George on those recommendations? Mel.

MR. BELL: Just real quick for clarification; so we're following a geologic feature here, which is painted shoreline of whatever; what is sort of the sweet spot for this as far as water depth? Assuming you've got the exposed rock habitat, what are we kind of talking about if you were drawing a band down here?

DR. SEDBERRY: For the habitat layer we looked at depths between 25 and 100 fathoms; and the sweet spot is right around 30 fathoms, but it deepens off of North Carolina a little bit, and it kind of breaks down off of Georgia a little bit. But really right at that 30 fathom curve on the charts is that first shelf break; and it is kind of centered around that.

DR. DUVAL: Are there other questions for George right now? This is the point where we need to have some discussion about options that we would like to select to take out for scoping. Our AP Chair is here next to me and he can provide input on what the AP recommended. He went over those yesterday. These are also located in that scoping document on I guess the real Page 8.

I'm not referring to the PDF, but the AP voted to keep the Snowy Wreck the same size and do away with the South Cape Lookout MPA, southern North Carolina MPA; add the 780 Bottom and the Malchace Wreck as test sites and require monitoring. That was the input from the Snapper Grouper AP. Are there thoughts around the table?

Remember, these are sites that we would select to take out for scoping meetings in January to give the public a sense of what we're looking for and also provide some direction to staff for further analysis. Mel.

MR. BELL: I'm not from North Carolina – and Robert can talk to this – but as I mentioned earlier the Snapper Grouper AP really tried to work with this and maybe it would have better if we had sort of phrased the question or what we were asking from you of what do you think about the pros and cons of these specific sites and leave it at that as opposed to thumbs up or thumbs down.

What you'll see as we go through this is they started the process maybe with some specific recommendations; and as we got farther down the coast, that sort of falls out. Their recommendations related to North Carolina may look a little differently from when we get farther south and they were kind of struggling with that process of yea or nay.

MR. JOHNSON: That is correct, Mel, and I think they liked the idea of these existing MPAs. People are already used to them and that's why they wanted to leave the Snowy Grouper MPA as

it was. It had already had captured some of those points on the inshore edge, too, so they were like why would we change it.

MR. HAYMANS: Just thinking about what the scoping meeting would look like; we have got the opportunity to really dig into some of this. What level of information I guess would the public be presented at a scoping meeting? Is it exactly what we're seeing now?

We're choking on data, which is a good thing, I think. Should we just limit these to the four recommended – for instance, in North Carolina just take the four recommended sites and that information to public scoping?

DR. DUVAL: That's a good question. I think the AP struggled with not having that occurrence data, so those X's and things like that within the box, because they were seeing simply the boxes on the map with the depth information but not necessarily any of the occurrence information or spawning information that is now included within the scoping document that you see at the back of it.

I think in talking to Gregg, similar to what was done for red snapper when the council was considering that closure and I was not sitting around the table at that time, but I think having some big maps that are laminated that people can actually sit around and look at and draw on and things like that is one of the props that would be used for the scoping meetings.

I would like to talk a little bit more about just the general structure of those once we finish going through all four of the states. There is certainly merit in going out with all of the recommendations that the expert workgroup came up with. They are included. I guess your suggestion is to take all three of the alternatives that you would see here, say, for instance, for North Carolina out for public scoping; is that kind of what you're suggesting?

MR. HAYMANS: I see Malchace, 780, South Cape Lookout; yes, those three, right. Well, I'm looking at the ones that have the typed "recommended" beside them. Well, there are no graph numbers on these.

DR. DUVAL: So are you looking at the alternatives that Gregg is showing up here on the screen?

MR. WAUGH: Doug, if you look at Attachment 5F; that's a draft of what we would propose as the scoping document and perhaps not all of the material that's attached to it, but certainly the bulk of it. As Michelle indicated, it does have the two types of charts. The way this is structured as per your direction is the alternatives that meet reconfiguration, occurrence and spawning, and there aren't any that meet spawning off of North Carolina.

What the AP has recommended, in addition to those that are included – well, the 780 Bottom is included. The Malchace Wreck doesn't come up because it doesn't have occurrence – isn't a reconfiguration and doesn't have spawning, but they recommended it, so you could add that as another alternative.

MR. BELL: I was just going to say one of the things we're struggling with – and we'll as we get into this a little more – and what the AP struggled with was – and I think Jim Atack asked this question – what is the goal, what is the quantitative goal or what are we trying to achieve in terms of an additional percentage of habitat or amount of habitat?

At this point, I mean, I would be reluctant to take anything off the table. You can see where there is certainly merit to arguing for a number of these sites having benefit; but overall is there a specific quantitative goal that we're trying to achieve; and then that kind of helps you understand how much additional habitat you might need to add or not add. That's sort of an overarching question here, I guess, and I know the AP struggled with it. I'm struggling with it myself.

DR. DUVAL: Well, I think we're all struggling with it. That's certainly something that we put to the SSC and asked them for their input, and they were unable to provide us really with any guidance. They could not put their finger on a specific percent target of area to protect that we should shoot for. I agree that it would be great to have some target, but I'm not sure we have any ability to defensibly establish one.

MR. BELL: So maybe what you use – and this goes back to why I'm so focused on mapping and understanding what we currently have – is if a particular habitat type in a particular depth of water represents beneficial habitat where these fish could be spawning, most likely are, most likely are spawning, then understanding quantitatively what you have now; then you can take that and then expand on that.

If you want a 10 percent increase, 20 percent increase; that kind of helps you there. Understanding the habitat itself kind of maybe gives you something to work with as far as a goal. That is what kind of directs you to move a box in a particular direction or add a box somewhere. Yes, I agree, it's really difficult but that remains a quantitative feature you can use, I guess, as a proxy for a potential benefit, perhaps.

DR. DUVAL: Well, I think we have a rough sense of habitat type out there, but as can see not everything has been mapped; so there is some issue there with that. Jack.

MR. COX: Our ultimate goal here is to define these spawning aggregate sites would be the most beneficial for anything that we're trying to do here; and that is just going to be something that is going to take some time and some monitoring. I think we need to find some of these sites that – work with some of these sites the expert working group had talked about; especially North Carolina, I kind of tend to favor what the AP had suggested – I just want to put that out there – and monitor these places and just be a little bit careful along the way here because we don't want to take up a whole lot of space in what trying to do until we know what we're doing.

MR. HAYMANS: I guess it's two parts. When I look at the goal and I look at the purpose; the purpose is to reduce bycatch. We have got some table here of bycatch but it is really low numbers; and to be able to measure a reduction in bycatch, I think it is going to be difficult.

Then I also look at part of that purpose and need is to protect the habitat. My question for the fishermen is how much anchoring occurs in depths that these MPAs are in? I asked that because what other damage might occur to the habitat aside from anchoring?

MR. COX: We anchor in all those sites.

MR. BOWEN: Zero off of Georgia.

MR. HARTIG: I anchor in 400 feet, commonly, when the tide lets me.

MR. PHILLIPS: And we're still going to have to remember that in spite of as good as these maps are, there are a lot of places that they still haven't sampled that we know that there is some fish at; i.e., that Deepwater Georgia MPA. I believe there is probably some fish on that edge. I talked to Marcel a meeting or so ago; they don't go out there because of the depths and the tide. We've still got places that we're going to have to use just from fishermen's input and common sense, more so than just the maps, and we have got to keep that in mind.

DR. DUVAL: So, again, this is selection of sites to go out for scoping. Gregg, I guess I'm asking you would there be any additional analysis done based on sites selected for scoping or would you all hold off until we got the input back from scoping before digging into some of those more detailed analyses that are required?

MR. WAUGH: It would be after scoping; because, again, with scoping you're outlining a problem to the public and then asking them for their solution. We've gone a little bit farther in here in that we're saying we think the solution is MPAs; so we want to be careful how far down we go in terms of justifying that as a tool before we give the public an opportunity to weigh in.

MS. BECKWITH: Would this be going out for scoping in January or next August? My concern, of course, is the timing, cart before horse, visioning, how this stuff gets perceived. Asking the public for solutions; are we putting this out before we allow the visioning discussions to actually occur and how is that negatively going to impact our visioning discussions?

I had the same concern when we were dealing with VMS. If we would have pushed VMS forward; I think it would have basically trumped any potential benefit we would have gotten from visioning. I'm not sure that this isn't going to be the case with this. I don't mind kind of going through the process, but comfort-wise I think this would make a lot more sense going out in August after we've gotten some feedback from folks through the visioning process rather than going – you know, sidestep with it.

MS. McCAWLEY: I have those exact same concerns because I do think that this is going affect the visioning and the success of that and the type of feedback that we get back. I just think that we need to think about that when we're figuring out when we're going to scoping with this. I agree with Anna; it seems like we should get the visioning in before the scoping on this. If we can't, I think that we just need to accept that this could negatively affect the visioning process that we've worked so hard on for a year.

DR. DUVAL: I don't disagree with those concerns; I think they're definitely validly. Ben.

MR. HARTIG: You can't take anything out more controversial than what we're taking out right now. It is one of the most controversial things that the council has ever dealt with. I hadn't thought about the visioning in the context that has been brought up by Anna and Jessica. They're really right on. If we do this before that, it is going to impact the visioning, in my opinion.

MR. CONKLIN: I agree with that. I feel like our Snapper Grouper AP didn't have exactly what they needed to see to be able to make their recommendations to the council. I would recommend taking a step back and really thinking real hard about what we're going to do and be very cautious on our way forward.

MS. BECKWITH: To that point, these presentations are excellent. I would love to see the AP go through these same three presentations we're seeing on each state and each of the sites. This is a lot more information in one sitting than we've had before, so this helps a lot.

MR. HARTIG: To that as well, the presentations we had – and we really haven't talked in detail about the overarching concerns about enforcement and how well these are going to work. George, well, I do want to put him on the spot because he needs to be right now. His long term, you know, working with these species over time and when we might expect to see some changes inside and out – when do you think we may get something to sink our teeth in? Just on your experience and knowing how long these things live, you've worked with them, my gosh, all your life, and what do you think – how many years do you think before we get a valid comparison between inside and out?

DR. SEDBERRY: I thin it is going vary from species to species and site to site. That is not really an answer;, but I think for things like vermilion snapper and black sea bass, we might see results pretty quickly. I've done a lot of work in marine reserves in the Caribbean; and really for some of those species like some of the snappers, it only takes a few years, less than five years to see significant huge increases in the abundance of snappers, the smaller groupers.

Things like black grouper and Nassau grouper take longer because they're longer-lived. There is a lot of behavior and social structure that has to come back before their population is rebuilt; but I think we should see some differences showing up in these areas. If they have been enforced or if compliance is good, you should see some changes within a few years. I'm surprised that – of course, the sampling is small.

As Marcel admitted, the sample sizes are small, but I'm surprised we haven't seen more in the Amendment 14 MPAs than we're seeing. I would have expected to see some significant results by now, because it has been long enough for some of those species.

MR. HARTIG: And to just follow up, I've read a lot of MPA research over the years and a lot of it has been done in clear water insular type habitats. Then when we go to these continental-type systems where the conditions are changing, that's the nature of a continental system. There are not as consistent as they are in the tropical systems. Fish move and you know with gag in

particular, in the spawning cycle about their movement, you guys did great groundbreaking work on gag migration area patterns.

But in the context of a number of these species, we see major movements in different times; and they're not all based on the same circumstances. There are a lot dynamics in this continental system, currents, temperature, turbidity, that makes these fish move. We talk about spillover to some effect; and your spillover, to me, for some of these is happening on a yearly basis.

Fish are moving in and out of these MPAs. Some of that is going to work against you in trying to get your inside and out because the fish are moving inside and out of these MPAs probably on a much more regular basis than we have any idea of. Based on my observations of vermilions in particular, I look at them and, boom, here they are in area. Where the hell did they come from?

They're four-pound average fish and they came out of nowhere. They weren't there all year and all of a sudden they show up for two months and then they're gone again. They came from an area where we're fishing on them because they've got the hook scars; so wherever they came from, there was pressure on them. It is difficult in how we look at these things and how we get the metrics we need to get success, because I don't think our metric is going to be same in the insular areas because of the movement. You know a lot about that.

DR. SEDBERRY: Your point about the tropical coral reefs showing significant changes in recovery in marine reserves perhaps being easier to document than up here, I think there is something to that because those systems are very stable. I think recruitment is more predictable and less variable than it is up here where you can have a cold upwelling or some event that can just come at the wrong time and kind of mess things up.

We may need a longer-term monitoring data base to detect those kinds of changes here; because if you just look at gag, it takes the right phase of the moon and the right water temperature and the right gyres to get good spawning and recruitment out of a spawning season.

Some of that is really variable; particularly now that we're seeing some climate changes and climate differences, we are seeing warmer temperatures than we used to and we're seeing fish moving farther north. Those kinds of things may influence this as well, so it may take longer to see those kinds of effects because of the other things that are going on. If the reserves are enforced, I think we will see those differences. Like I said, I was kind of surprised we haven't seen more already.

MR. COX: When you go down this road and you go out to scoping and you ask fishermen and explain to them what we're trying to do and what we're trying to protect, you'll get a buy-in from the fishermen. These guys really know this stuff, they know this bottom and they really need to be included in all this.

When you give them something back like the Snowy Wreck off of North Carolina that is producing fish and seeing more snowies, if you can tell the fishermen, hey, we're going to give you an increase in your ACL because of some of the things we've done in the past like the

Snowy MPA, then you'll start to get a buy-in and they will want to step up to the plate and say if we want to do more of that and help you. I just wanted to throw that out there.

DR. DUVAL: I think, again, that was one of promises of the original Deepwater MPAs was that down the road we might be able to do some of that, was have a little bit of that flexibility, but those days are a little bit fuzzy for me. I was sitting on the other side of the table at that point.

MR. PHILLIPS: Yes, I agree, I don't want this to shipwreck visioning. There are two things. If we go ahead and take this out to scoping, it can be informational that they could try to incorporate in their visioning ideas. The other part is, like George said, it works with compliance. The public is also going to need to hear what we heard from law enforcement, that they are stretched banjo string tight, so the only way we get compliance is really with public buy-in; so they can weigh that.

Then if they bring something back, this could be informational and they could network and tie it in with visioning instead of taking it to them and saying this is what we're thinking about doing and, oh, by the way, we have this other line over here. If we go ahead and take it out to scoping, we need to go ahead and give as full a picture as we can without just doing information overload so they just go, oh, my God!

DR. DUVAL: So you're suggesting that if we move forward and take this out to scoping, which is currently the plan – that was the motion that we made at the last meeting – that this be linked to visioning somehow in terms of we're considering spatial management tools or something along those lines. Jessica.

MS. McCAWLEY: I just disagree with that concept. I think we've got the cart before the horse. I think that it looks like you're really asking the public for their opinion; that we've already kind of predetermined and started working on something; and the people that know how the council works, if you spent that kind of time preparing those documents and getting that stuff ready, then you've got to be thinking about it relatively seriously. I still think it's a bad idea. I go back to the same comments that Anna and I had before.

MR. BELL: I'm sensitive to the whole scoping process, too, but I'm also very sensitive to – I mean I am a believer that MPAs are a useful tool. I believe that. It's a powerful tool and we're using it now, but we don't quite understand what we're doing with the tool right now. It is kind of hard to convince the public that, yes, we need to use this tool a little bit more when we're not quite sure what we're doing with it at this point.

I don't want us to sort of rush to failure, I guess, or rush to a point where we've pushed this or it's perceived that we're pushing it and it fouls up our ability to perhaps use the tool in other ways in the future. I am sensitive to the visioning; I'm sensitive to the way we sort of demonstrate that we have been stewards of this tool.

I am going to ask this; is there a way that we could deal with the visioning first where discussion of MPAs will certainly come up in that. Is there a way we can push off the scoping aspect of this

and not taking anything off the table again? I think what the working group has brought us, they're all valid sites.

They're valid recommendations based on the best available science; and that will only increase as additional monitoring increases. I'm not in a position to take anything off or recommend anything specific. At some point we need to take this to the public, but can that be pushed off beyond visioning, and we'll, of course, hear a lot about MPAs. Again, we can talk to the public in terms of it is just simply a tool and here is how it is used and here is what we have in place now. I think the two things landing on top of each other could be kind of messy.

DR. DUVAL: I had on my list Ben and then Zack and Chris; and then what I would to do is suggest we sort of wrap up this discussion because I'm sensing some reluctance and for valid reasons. Obviously, I'm very sensitive to the visioning process and I want it to be a success. I'm going to suggest we take a break for lunch. If there is anybody else who would like to get their name on the list before we break for lunch, I have Ben, then Zack, then Chris, Wilson and then George.

MR. HARTIG: I didn't follow up on one point. I think probably my biggest disappointment of the data that we've seen today is the Oculina Bank. They went to the spot, Jeff's and Chapman's Reef, where the intact oculina thickets are; the only two major spots in the world where those giant thickets exist anymore.

I remember the video from Harbor Branch that was done when they first looked at those sites; and it was incredible the biomass and diversity of the species at that time. This is how many years later that we're looking at this since we initially closed those areas, Gregg?

MR. WAUGH: Well, we had a ten-year sunset on it first, and we're coming up on our ten-year review, so 20 years.

MR. HARTIG: And in 20 years we don't even near approach what we once had in those two specific sites; so that to me – and I realize that one is closer and the enforcement has been tough and we haven't been able to keep people out of there. And these are farther offshore; they're not going to be visited as much.

We may get better bang for our buck; but to still come before the public and use those – and I get hit with it all the time because I live there. That wasn't the question I wanted to really ask, and I wanted weigh in on – and I'm thinking on my feet here. I'm listening to the conversations and then I'm trying to think of how we got to where we are.

We're here because the 240-foot closure was removed, and that was a significant management obstacle for a number of us that fish in those depths. Really, we're reacting to that specific recommendation or when we removed that, we said we were going to come back and do this. Now I'm teetering on the other end of the visioning.

Now I'm looking at going – you know, this is what we said we were going to do based on removing that 240-foot closure. I now don't have as much – just thinking out loud – I don't

have as much reservation about going forward; but if the rest of the council does, I don't have a problem with that.

MR. BOWEN: I have reservations about letting all this come together at once. I think Jessica and Anna are dead-on. I think from my constituents in my state, to echo Madam Chair, it is going to leave a bad taste in their mouth. I feel like as a council we should decide one or the other and different times but definitely not both and definitely not at the same time do we need to bring this forward.

MR. CONKLIN: I will try to make this fast, but I have reservations as well. From the fishery-independent data that we've seen, but there are years and years of fishery-dependent logbook stuff we're using. I admire the research and I just think we need more of it. We've done two or three ROV dives on an area that is six hours.

The place has been out there since 2008 on some stuff like that. I just don't think we're getting an accurate representation of what is really out there; and we don't have enough information to draw that conclusion and then be able to move forward with something new. We need more constant monitoring, I do personally to make a decision like that.

DR. LANEY: Madam Chairman, I'm not on your committee, but I think Jessica and Anna have made a persuasive argument to me. I hadn't even thought about the fact that you could compromise the visioning process by putting these out there. I'll qualify that and saying putting these out there without the full information that the council has been privileged to see this morning, I think that it would be important for the AP, especially, to see the full complement of information.

Now, whether you could get out to them in an expedited fashion and give them a second opportunity to look over things and still move forward with the visioning process so that you don't compromise the latter by the former, I don't know. I hear and understand and appreciate their concern although I share Ben's position, too, in that – and I think Mel shares it as well – MPAs are a great tool. They're a valid tool; they work. The good point Ben made about the tropical areas being more stable from an environmental perspective and therefore may show a response earlier than some of these more temperate zone MPAs that the council has established. Those are my thoughts on it.

DR. SEDBERRY: I just wanted to add a quick thought to my answer to Ben about why we may not be seeing a huge difference in Amendment 14 MPAs even though they've been out there a few years, and that is that in addition to having compliance you have to really protect the best area.

You have to pick an area that is heavily fished and has all the components, has the habitat, has the potential; and then when you protect it, you have better potential for seeing a difference. I think in the case of the existing Amendment 14 MPAs, I think the orientation of some of those ended up not being the best orientation for protecting; and so you're not going to see a huge difference simply because they weren't established to be able to show that in the first place. That is why this expert working group is looking at reorienting some of those.

MR. BOWEN: Did you say we needed to pick an MPA that was heavily fished?

DR. SEDBERRY: Yes; if your issue is bycatch and if there is no fishing going on there, you're not going to have any bycatch; and so to reduce bycatch, there has to be bycatch to begin with; or to reduce the effects of fishing, there has to be fishing to begin with. If you pick areas that are lightly fished or where there is no bycatch, you're not going to see differences accumulate as quickly as you would if you pick an area that is heavily fished.

MR. BOWEN: Thank you for that point. Okay, maybe I'm speaking a little out loud and off the cuff, but the projected MPAs off of Georgia is 90 miles. No one is going to go out there, period, so why even have it to begin with?

DR. SEDBERRY: Well, we'll look at that when we get to Georgia.

MR. BELL: Are you talking about the current Georgia MPA?

MR. BOWEN: That one and the one that –

MR. BELL: Yes; well, I was there when they were drawing the boxes originally, that started out a lot closer to shore; and it slid farther offshore because there was a lot of – if you move closer in, you'll find that there is fishing. There was back then, but it slid farther off.

MR. BOWEN: It is not now.

MR. BELL: But there was benefit to other things like tilefish and all; but the box ended up where the box is because at that time there was a lot of perceiving fishing a little bit farther in.

MR. BOWEN: I think that's a great point that Dr. Sedberry made, and I just want us to remember that point as we move forward. If there is no fishing or no effort, then there is really no need.

MR. PHILLIPS: And just to that point, Zack, the Georgia MPA was for tilefish and snowy grouper, and it did what it was supposed to do. Of course, nobody has looked at that snowy wreck that was on there, that rock pile or that airplane actually, I think, that I know of. Actually I'm pretty sure nobody has ever looked at it; but that is what it was for, for snowies and golden tile.

MR. BOWEN: And I'm not talking about the current one; I'm talking about the ones that we're discussing coming up.

MR. HARTIG: Just to Zack's point about why have that one in Georgia, Florida fishermen were going commonly to Georgia to catch golden tilefish. That did help the golden tilefish, which it was supposed to do. George and I have a little bit of a different take on MPAs in areas that aren't heavily fished.

To me you're still getting the benefit of animals that are going to be a bit larger. You're going to have spawning in those areas potentially, and then they can help provide recruits to the system. Even though the bycatch portion of what we're trying to do, we won't address that, but the spawning part could be important. George will probably weigh in, but it could be important for the entire system at least where that MPA is.

MR. BOWEN: But it says in some of my paperwork here our reasoning for doing it is to reduce bycatch for Warsaw and the snowies – speckled hind.

DR. DUVAL: Warsaw and speckled hind. Is there anybody else who has something new to say around the table? I'm trying to coalesce what has been said. There is significant and valid concerns about how moving forward with scoping at the end of January is going to impact our visioning process; and I think some valid concerns expressed about that.

There is also the reason why we're at this point, anyway, which was removal of the 240-foot closure and the council stating that it was going to do something else. I would like you to think long and hard about this over lunch. I'm going to suggest that we break for lunch now and then come back – you know, the original plan was to go through each state and make some selections for scoping. I would like to go through the rest of the information for each state. I think it's important to do that. I really need folks to think about the concerns that have been expressed and what the committee would like to do in terms of moving forward and what kind of timeline.

It has been suggested to move forward with visioning first and getting input on the utility of marine protected areas for spatial management and continue forward with this document after that; so think about that while you're out for lunch. Charlie.

MR. PHILLIPS: Madam Chair, as we think about that for lunch, when do expect visioning to have some thoughts or answers; so that if we want to wait until visioning is done or almost done, when would that timeframe be so we'd know? If we're going to do one before the other, when would that timeframe be?

DR. DUVAL: I think it was staff's recommendation that we go out for port meetings starting in February; that they were going to wait until after the January meetings, because there are a number of other documents that I think have to go out during those January meetings. It would be some time between February and probably May is when the input would come in. Are there any other comments before we recess for lunch? I am going to suggest we come back at 2:00.

(Whereupon, the meeting was recessed at 12:40 o'clock p.m., December 4, 2013.)

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened in the Cape Fear Ballroom of the Hilton Wilmington Riverside Hotel, Wilmington, North Carolina, Wednesday afternoon, December 4, 2013, and was called to order at 2:00 o'clock p.m. by Chairman Michelle Duval.

DR. DUVAL: We're going to go ahead and get started; we still have a lot to do today. We also have a public listening session at 5:30 this afternoon. What I'm going to do is ask our presenters

to come back up here and run through the rest of their presentation. Stacey, I think if you will come up here and just finish going through the information that you have for the rest of the states, that way you can do your thing and then I'll ask Marcel to come up and do the same thing for South Carolina, Georgia and Florida; and then I'll have George come up and do the same thing for that. We'll get all the information out there on the table and then we have a discussion about how the committee wants to proceed.

MS. HARTER: Okay, here is what we know so far for the South Carolina sites for scoping. Seven sites have been proposed and we have surveyed in six of them so far. The only one that we haven't done anything in is the northern South Carolina Extension. Your existing MPAs are shown in red; the northern South Carolina and Edisto MPAs.

Again I'll just start at the north and work my way south and show you what has been done in each of them as far as mapping and fish go. This is the mid South Carolina MPA, and this is the mapping that has been completed so far; with the depth range here being about 44 meters down to 179 meters in the blue. We've done three dives here; one in 2012 and two in 2013. Here are a couple of pictures. Basically the habitat was moderate to high relief; about four to seven meters; very high rugosity; nice complex habitat with overhangs, ledges and crevices for the fish.

You can see a small aggregation of hogfish here and a little school of tomtates and a couple of scamp in this other picture. As far as the fish go, our tomtates and vermilion snapper and lionfish were the most abundant species. We saw quite a few scamp, and this includes one aggregation of twenty scamp; quite a few gag grouper, fourteen of them; and also one of the target species, the speckled hind.

Next we will move down to Devil's Hole 2 and 3; since they're embedded in one another, I'll just do them both together. Devil's Hole 2 is this bigger area here and Devil's Hole 3 is the smaller area. This is how much we have mapped so far of this area. The depth range here is about 44 meters in the red down to 244 meters in the blue; so there is quite a nice little drop-off right there at that ledge.

We've done three dives in this area; two of them in Devil's Hole 2 and one dive in 2013 in Devil's Hole 3. Here are a couple of images from Devil's Hole 2. The habitat was primarily a five-meter rugosed ledge. You can see scamp and tomtates, lots of live bottom with sponges and soft corals growing on it – white grunt there.

As far as the fish, again vermilion snapper, tomtates, lionfish were all abundance. Scamp were quite abundance again. We saw seventeen gray snapper, a few gag grouper and one red grouper. Here is Devil's Hole 3 and this is that dive on the really steep drop-off there and the multibeam. It ended up being about a 40-meter overall relief; no vertical walls, though, just kind of a gradual decline. We saw some snowy grouper on there. There is a scamp.

You can just see there is not as much live bottom growing on the rock here; and I think that's probably because of the deeper depths. I have only two species to show because it was a 2013 dive so I don't have a full species list, but we did see twenty snowy grouper and eleven scamp on that one dive.

Moving on down to the Charleston Shelf Mapping, we have a pretty good portion of that proposed area mapped. We have done four dives there; two in 2012 and two in 2013. Here are a few pictures of what it looks like; low to moderate relief, about one to five meters; and high rugosity; nice live bottom with black corals and soft corals.

We did see a couple of aggregations of scamp here and here is one in the gray head spawning phase. Here is a list of the species that we saw; again, tomtates, vermilion, lionfish. Scamp were quite abundant; we saw 228 of them. Like I said, there were a couple of aggregations of about twenty to twenty-five scamp in each; and then we did see a couple in the gray head spawning phase. You can see all the other species that we saw here.

Moving on down to the Edisto Reconfig 3, and that is this box right here, it basically takes the existing Edisto MPA and kind of rotates it a little bit so that we get more of the shelf-edge habitat. You can see how much of it has been mapped so far. The depth range here is about 46 meters down to 89 meters.

Because this encompasses the Edisto MPA, we have done quite a few dives here. We have sampled in this area every year that we have surveyed. I think overall it is a total of 25 dives that we have done in this area. Here are a few pictures of what the bottom looked like. It is about low to moderate relief ledge, one to four meters; again, high rugosity; nice greater amberjack there; no rock hinds underneath the ledge. There is a long list of species here; tomtates, vermilion, lionfish, scamp again are usually the top species. We did also see one aggregation of 50 scamp here on one dive. We saw seven speckled hind and some snowy grouper, and then I'll let you look over the rest of the species.

Finally, the last one is Edisto South Extension; and this is what we've mapped in the area so far. We've done four dives over the years here; in 2007, 2008, 2009 and 2012. You can see that they're all kind of concentrated on this one feature in the multibeam. Of the area that we have mapped so far, that is kind of the only hard-bottom feature that stands out.

Here are some images from the bottom; low-relief outcrops, about a meter relief; again, high rugosity with schools of tomtates, lots of lionfish, scamp. You can see how abundant the tomtates and vermilion snapper were. Again, scamp were also fairly abundant. That includes one aggregation of twenty scamp. Again, I'll let you look at the rest of the species that is on the list there. I believe that's it for South Carolina.

Okay, moving on to Georgia, again I will tell you that Georgia is the site that we have the least amount of information for, but I will present to you what we have so far. Five sites have been proposed by the working group; and we have surveyed in four of them so far with the exception of the Georgia Reconfig 2 up here. We haven't done anything in that area.

The first one is Georgia Extension, which basically takes the MPA and moves it a little bit west to cover more of the shelf edge. We don't have any mapping for this area, but we did do three dives in 2004 and two dives in 2006 here. We hit a lot of sand areas on these dives. However, there were areas where it was low relief, like a foot or less rock outcrops and pavement. That is what you see in the pictures here.

As far as the fish go, tomtates were the most abundant species. We did see twenty red snapper, for Warsaw grouper, two snowy grouper and a blueline tilefish. Moving on down to Georgia MPA Reconfig, this is the mapping that has been complete there, and this was all done by the SEFIS Program.

Over the years we have done six dives there; in 2004, 2006, 2007 and 2012. A couple of pictures; again, it was very similar habitat to the other area, a lot of sand but some pavement and some areas of small rock outcrops. Here is the fish; red porgies were the most abundant in this proposed area, followed by scamp. These red snapper and the Warsaw grouper are the same that were found in the Georgia Extension Area; and that is because that dive happens to fall in both of those proposed areas.

Okay, the only two left are the St. Simons 2, which is the most northern box, and then the Extension 2, which is the southern box. We haven't done any ROV dives here, but our program as well as the SEFIS Program has done a little bit of mapping in this area. I believe we tried to dive on here last year, but the currents were too strong, which is something we deal with quite often in the Georgia areas; strong currents and quite bad visibility. That's it for Georgia.

Finally, the Florida sites for scoping; eight sites have been proposed; and we have surveyed in three of them so far. You'll notice that they are the most northern three, and that is because of the large range of our survey that we're covering. Given only two weeks of ship time, it is hard for us to expand even into a further area than we already have. Starting with Fernandina, this is the area that has been mapped. You can see a good chunk of it has been and that is thanks to the Navy.

We've done four dives here, two in 2012 and two in 2013, along that ledge. Here are a few pictures for you. This is the same ledge system that runs through the North Florida MPA; but it is not quite as steep of a drop-off as we see inside the MPA. Regardless, the overall relief was about eight meters.

You will see both of our target species we saw there, which is nice, Warsaw and speckled hind. We had some blackfin snapper juveniles that we also saw in this area. Here is the species list; again, tomtate and vermilion were very common. Scamp is right up there again; nine speckled hind and two Warsaw grouper; and these three blackfin snapper were all the juveniles.

St. Augustine 2 is completely mapped. You will have to ignore the ROV dive text on here. This is a GO TIF from the Navy, and I couldn't erase – it was already on the image and I couldn't erase it. Those are not our ROV dives; it's the Navy's. This is where we have done ROV dives along this ledge here, and we have done five dives over the years.

A few images from the sites; mostly high-relief ledge, about five to ten meters; high rugosity; but it was fairly devoid of fish for how great the habitat was. We had some areas that looked like this where we saw small schools of tomtates and such; but it really should have had more fish than it did. I think that's due to a possible upwelling event that was going on.

We have a small CTD that we attach to our ROV and it measures depth and temperature throughout the entire dive. When we got the ROV back on board, we checked out the temperature and noticed that it was significantly lower than other sites in that same area; so I think that's probably why we were seeing the lack of fish there. We did also see live oculina in the area. Here is a list of the fish with the grunts and vermilion snapper being quite abundant.

Moving on to St. Augustine 2; this also has been entirely mapped. We have done three dives over the years on that ledge system there. Here are a few pictures. It is low relief, about one to two meters in relief; again, it is the same continuation as the North Florida MPA Ledge, but it is a little bit more broken up and less distinct, but you're still seeing schools of tomtates and hogfish and lots of live bottom. Here is the fish species list; tomtates and vermilion snapper were again quite abundant. Lionfish and scamp were up there as well. That would be everything.

DR. DUVAL: I was going to ask if folks had questions now because Stacey has a flight out later this afternoon. Doug.

MR. HAYMANS: Stacey, we've had a presentation in the past from the Navy, I guess, about some of their stuff. The limited information that they gave for the Fernandina, surely all of that area is mapped. Is there a reason why they didn't provide more? The reason I say "surely" is that is Kings Bay; and I would think that all of that and not just that swath would be mapped.

MS. HARTER: That is all that we were given from them. We could try to contact them again and see if they have anymore. I know the mapping that they did was related to their Warfare Testing Range that they're putting out there. That area in Fernandina and then the area down in the North Florida MPA were the two areas that they gave to us at the time.

MR. BOWEN: Stacey, great presentation, all of them. What I find encouraging or one of the things I find encouraging is the number of scamps that were looked at. Being that's one of our unassessed species at this moment; will this in some way be able to help or to contribute in our future assessments with some of the species such as scamp? That's point one. What is a little discouraging for me is that – and I'm recalling from memory on the North Carolina ones, but I see any numbers of red snapper. I didn't see any numbers of red snapper in the Florida ones; and we only have a total of 37 for Georgia. Is that a little awkward?

MS. HARTER: I think we're a little bit deeper than where the red snapper are. The SEFIS Program is targeting red snapper; and they're primarily targeting a little bit further inshore than what we are. I think we're just a little bit too deep to get the big red snapper populations; so I think that might explain why.

As far as the scamp goes, I was actually talking with somebody earlier saying that we've got this long-time survey and maybe our data should be going into the stock assessments to provide additional fishery-independent data. That's definitely an option and we'll look into that definitely.

MR. BOWEN: What time of year or is this spread out through the year that you've done these dives?

MS. HARTER: It primarily has been around the June/July timeframe is when most of our surveys have been done.

MR. BOWEN: And do you think with the numbers of scamp that you've seen; do you think that was because of spawning aggregations or do you think otherwise?

MS. HARTER: I can't say for sure whether there were spawning aggregations or not, because we're a visual survey only. We don't have the ability to actually take samples and do the gonad samples and see if they're in a spawning phase or not. I can just tell you that we've seen large aggregations of fish together; and we actually just started seeing them around 2012. It has been a fairly recent thing that we've seen all these aggregations.

MR. BOWEN: And you used the term "gray head" for scamps.

MS. HARTER: The gray head; it is one of their color patterns and it has been associated with a spawning condition of the fish.

MR. BOWEN: So if you're seeing gray heads; then chances are they may be spawning aggregations?

MS. HARTER: Chances are it may be, yes.

MR. BELL: On one of your slides for South Carolina, it says southern North Carolina ROV dives. I assume that's supposed to be South Carolina and you might want to change that.

MS. HARTER: Yes, probably; that was a typo.

MR. BELL: And on that particular slide, which is the ROV dives, you could see kind of a composite of different survey efforts with those different quality of product on there as far as – I guess those were different mapping events or sometime; but it shows how even if you kind of piece all that together, you might have different quality, depending on who does or what equipment you're using and all.

One more thing related to the Navy and Doug's point is that I'm not sure that the stuff down to the south probably had to do with NAFAC and op areas or things they were wanting to develop; but maybe you guys have or somebody would know how to, but the Navy may actually have a lot more mapping done than may be potentially available. I don't know who to kind of ask the question to or whatever, but I don't mind researching that a little bit. I used to do some of that related to an entirely different use; so there may be data there that they have access to, that it is just a matter of asking the right person.

MS. HARTER: I agree with you; I think that's a resource that we could definitely tap into and try to get more information.

MR. BELL: That would be worth exploring somehow. I'm not sure who the best person would be to do that.

MS. HARTER: I don't know either.

MR. PHILLIPS: Stacey, do you have how deep the dives were in that Georgia Extension in 2004 and 2006?

MS. HARTER: That is something I could look up for you. I don't know off the top of my head.

DR. LANEY: To Mel's point, we have a Navy representative on our Habitat and Environmental Protection AP who is Carter Watterson. He could probably tap us into whoever holds the bottom mapping data.

MR. HARTIG: So when we're starting these transects and you've got a big drop-off; are you starting at the bottom and working up or are you choosing a specific depth for a transect in any one particular dive?

MS. HARTER: If we have a ledge type of system where there is some kind of a drop-off, usually we'll start at either the top or the bottom. It kind of depends on what the currents are doing and what the ship can do for us; but we try to hit all aspects of the ledge. If we start at the bottom, we will work our way up north and then right along the top for a little bit and continue down and kind of do an up and down kind of thing, so we're covering as much of the different areas of the ledge that we can.

MR. HARTIG: So you're really intercepting different – you're into almost the deepwater complex at the bottom base of some of these things; and then as you get to the top of them, you're intercepting more the mid-depth part of the fishery; is that –

MS. HARTER: No, it is pretty much the same. The ledge system is not that wide. You can over it with the ROV and easily get back on it and go up again. They're not that wide that you're getting a different complex of species.

DR. DUVAL: Are there any other questions for Stacey? If not, thank you very much, Stacey. Now I would like to call Marcel back up here to take us through the rest of SERFS information.

MR. HARTIG: And what presentation is this and where is it?

DR. DUVAL: This is Attachment 5H. It is "SERFS MPA Overview, 12/04/2013".

DR. REICHERT: It is all in one presentation.

DR. DUVAL: Marcel's is all in one and George's is all in one. I believe we're on Slide 40.

DR. REICHERT: I just wanted to remind the committee that the next slide, the graphs are having the same structure as we had seen before. The red are the chevron trap stations; the green

circles are the short-bottom longline stations; the purple boxes are the current MPAs; and then the blue boxes are the proposed MPAs. That is the same structure for the next couple of slides.

I also wanted to remind you of a couple of things. First a clarification to what Stacey said in terms of sampling that SEFIS is doing. I would not say that SEFIS is targeting red snapper. They're sampling in a similar manner that MARMAP has done in the past; so there is no targeted sampling. We are targeting live-bottom habitat. We are not targeting species.

Also, we have not had a chance to do the species composition and density analysis; so what I'm going to show here, as I've done with the North Carolina MPAs, is showing what sampling densities we have available in the various MPAs. Last but not least, I need to apologize because we inadvertently gave the St. Simons MPAs to Florida. I have corrected that in this presentation, but I didn't correct it in the presentation that is available for you. I'll make sure that corrected presentation will be e-mailed to you.

With that, off of South Carolina the table has also the same structure. The proposed MPAs with the red asterisks are MPAs that we have used or could potentially use as a comparison for existing MPAs. As you can see, we have a considerable amount of sampling in the MPAs; the least number of samples in the northern South Carolina Extension.

If you look at the Edisto Reconfiguration Number 3, we have a considerable amount of chevron trap sites in that proposed MPA. For our short-bottom longline survey, the sample sizes are considerably lower. We do have some historic as well as current sample sites. The advantage of the chevron trap sites is that we have considerable numbers of historic and current samples in most of these proposed MPAs.

This is a graphic of the same type of information with the different colored bars indicating the different sampling years. As I mentioned earlier, particularly in the Edisto Reconfig 3 and in some of the other areas we have considerable numbers. The purple lined MPAs are the current MPAs; and you can see that the samples in some of the proposed MPAs are comparable to the number of samples we have in both in the northern South Carolina MPA and the Edisto MPA.

These are some of the numbers for the short-bottom longline survey. As I mentioned earlier, the numbers of current samples are considerably smaller, but that is also because we haven't done any sampling or had an opportunity to add any stations since 2012.

For the Georgia MPA, I mentioned earlier that the current Georgia MPA is the deep water; so we have very little samples. We have a considerable number of stations within the various proposed MPAs as you can see here. Unfortunately, we have no short-bottom longline stations in any of them. We do have historic and current stations in all but one proposed MPA.

The numbers are not huge but they are considerable provided in the general numbers of sampling stations we have in the various MPAs. This is a graph with the structure similar to the others with the different colored bars indicating the different years. As you can see in the Georgia MPA Reconfiguration we were able to add some stations in the last couple of years.

We are hoping to continue at least in a limited amount to do that in the future; but as I mentioned earlier, there is that tradeoff between sampling in new areas and ongoing monitoring in established stations. Then is the coverage in the proposed Florida MPAs. As you can see on the right-hand panel, the two southern-most proposed MPAs are slightly south of our southern-most station; so we don't have any samples there.

Unless we extend our sampling range, it is unlikely that we will have sampling in the future; but we have a considerable number of sampling sites in the northern part of the Florida proposed MPAs, as you can see on the left-hand panel. In an overview, the blue MPAs, those are the southern-most MPAs.

We have in particular some historic and current samples in the St. Augustine 2 and Extension 2 MPAs, but very little in terms of short-bottom longline or chevron trap sampling in the others. Again, the red X indicates that is an area that has a potential use as a comparison with existing MPAs. This is similar information in a bar graph.

This indicates that we have decent coverage, especially in the St. Augustine 2 proposed MPA. Short-bottom longline, very little coverage, as I mentioned earlier; only one station and we haven't added any in the current MPA and none in the proposed MPAs. That is all I had. If you have any questions, let me know.

DR. WILSON: Not a question; just a followup from our earlier conversation. Dr. Kellison texted me to let know that he has already spoken with Carter Watterson in detail about the Navy multibeam data; and to his knowledge between NMFS, including Stacey, we have everything that is available.

MR. HARTIG: Has SEFIS done anything in the St. Lucie Humps MPA at all?

DR. REICHERT: If it's not in the data here; I don't believe that have, although this is through the 2012 data. Tracy.

MS. SMART: These are the sampling stations that we started out the 2013 field season with. They may have done some drops in that area to test out whether or not there has been any areas that we could add stations; but we haven't incorporated those yet because we're still working our way through the 2013 field data.

DR. REICHERT: We finalized our field season in October; so a lot of that information is still in the process of being entered in quality controls.

MR. HARTIG: That's great to hear because that MPA lies south of St. Lucie Inlet, which was the line that was demarcated for SEFIS, but it is not very far south of that. I'm very happy to hear that at least there has been some exploration.

MS. SMART: I'm not if there has been or not. I would have to ask probably Nate Bachelor to confirm; but once we have the 2013 data finalized and all the latitudes and longitudes checked, I can get back to you on that.

DR. DUVAL: Are there any other questions for Marcel? All right, if not, Marcel, thank you very much. Next up is George to finish the rest of the expert workgroup recommendations. Just to let folks know, this is Attachment 5I in our briefing book. I believe we would be on Slide 23, which starts the South Carolina slides.

DR. SEDBERRY: This is the overview of the proposed MPAs for speckled hind and Warsaw group off South Carolina, starting at the northern South Carolina MPA Reconfiguration, adding in Devil's Hole and looking at the Edisto MPA Reconfiguration. This map, like the ones for all of the sites, shows the proposed MPA, any bathymetric data that we have – this has some multibeam sonar in it.

Then the point data for spawning speckled hind, which are the purple stars and then just capture locations for speckled hind are the X's and point observations for Warsaw grouper are the plus signs. As you can see, we have a lot of point observations along that shelf-edge reef that has been mapped and some actual spawning locations.

The shape of the reef here is one of those promontories where the reef sticks out over into deep water. As has been mentioned before, these kinds of reef formations in the Caribbean and other places are known spawning locations for a variety of reef species and are spawning locations for speckled hind and perhaps other species as well.

Moving down to the mid South Carolina MPA; again, that is not one of the recommended ones, so we won't move down to that one. This again shows the northern South Carolina MPA extended to the west. This is the extension here on the west side; the point locations for speckled hind and Warsaw grouper.

Again, this possible aggregation site as the 30 fathom curve kind of comes in here and then comes out to a point and then turns back west again – these kinds of promontories are thought to be important spawning locations for a variety of species – another view; the mid South Carolina MPA with the promontory up here; Devil's Hole, a really spectacular reef promontory. It's a paleo shoreline, an old cape that is now submerged – and then the Charleston Shelf MPA.

Again, a lot of point locations for speckled hind and a few for Warsaw grouper. I don't see any spawning locations on this particular map – yes, we do, we have the spawning Warsaw grouper – this is a report from a book of the spawning locations for Warsaw grouper – and then there is a spawning speckled hind as well. Again, with the multibeam bathymetry layer, shown here under the proposed Devil's Hole MPA; you can see again this promontory on the reef that sticks out over into deep water, which causes a deflection of currents and upwelling in a variety of hydrographic conditions that are thought to be conducive to spawning in a variety of reef fish.

The recommended location – moving farther south along South Carolina is the Edisto Reconfiguration. This is the current Edisto MPA which captures or includes many point locations for speckled hind, but reconfiguring that MPA to run parallel to the reef with the northern and southern boundaries being parallel to lines of latitude to ease enforcement is thought to include – will include more point locations, some spawning sites, and then perhaps easier enforcement because of the boundaries being parallel to lines of latitude.

This is the fishing displacement model that Nick came up with showing that consideration of these sites will have a higher effect on reducing catch of associated species than we saw off North Carolina but still quite low. For the recreational headboat logbook data, again showing that there would be some potential reduction in catch of associated species but it is quite low.

The summary table from the excel spreadsheet shows the total square miles of these areas that spawning locations occur for speckled hind and many other snapper grouper species and perhaps Warsaw grouper in Devil's Hole; the percentage of habitat that would be protected; the percent of the stock that would be protected for both species using two different models; and then the percent landings reduction potential for associated species in the recreational and commercial fishery; and the same data is shown graphically. That's it for South Carolina. Questions?

MR. CONKLIN: I just had a question about the Warsaw groupers, the yellow star; what does the question mark mean beside it; or is that just another symbol?

DR. SEDBERRY: The question mark is that it has been reported by a fisherman or other observer. It's not a scientific data point and has not been confirmed. I think that is mention of a Warsaw grouper spawning that was reported in a book. Do you remember, Ben, what the story was behind that one?

MR. HARTIG: Yes; I don't remember the – Rusty probably knows; he has got a photographic memory. He could come up and he could tell us. I don't remember the reference, but I do remember it was in a book.

MR. HUDSON: Yes, Jack Frost had come up out of Daytona and worked his way all the way up and lived and died in North Carolina. He wrote several books and that is where Nick Farmer had found that online.

DR. SEDBERRY: And those are two points associated with the Devil's Hole configuration shown on the map that is displayed right now.

MR. BOWEN: Dr. Sedberry, you touched on the recreational headboat just a little bit; and you said that it would be reduced and you said very low; could you just touch base again and maybe go over that one more time.

DR. SEDBERRY: Yes; this is in Nick Farmer's paper that was published, and it's in the briefing book as well, the details of how this was calculated. Basically what he did was look at the headboat grids, which are shown on the map that is being displayed right now, and looked at what percentage of the catch reported in the logbooks would be excluded by each configuration.

For example, these are all in the light blue headboat reporting squares; and so that is less than 1 percent potential reduction of other snapper grouper species if this is closed to headboats. I don't have the details on the top of my head about how he came up with those calculations, but it is basically from the logbook data.

MR. JOHNSON: George, we had a lot of heartburn among the AP about that whole table because we felt like it did not address the private recreational sector at all. The headboats are few and far between now, and the biggest user group out there is going to be your private recreational and it is not represented in any of this.

DR. SEDBERRY: You're right; and there is a lot of headboat data, but it's not very accurate. The position of where they're fishing is not reported accurately. The depths are not reported at all. All you get, really, is the catch in one of these areas and the date information. It is a lot of data but the quality is not great; and we are missing the private recreational boat because we just don't have the reporting system for that.

DR. LARKIN: So that percent reduction, just keep in mind that is for the whole South Atlantic Region; so from the Virginia/North Carolina Border all the way down in the Florida Keys. That is why that reduction is so low. If take like amberjack, where it is 1.1 million caught a year; well, you know, you put those grids on top, you remove those landings that were underneath that grid, so those were small numbers of landings relative to the total 1.1 million. I just wanted to point that out.

You asked about the private charter MRFSS; MRFSS, we're limited because we don't know the spatial grid. We know what state and jurisdiction, so, you're right, that wasn't included in the analysis, but the headboat had the grids. We incorporate that with the – overlay the MPAs on top of them.

DR. SEDBERRY: Thanks for that clarification, Mike, and feel free to jump in anytime to further explain some of the data that went into this.

DR. DUVAL: Are there other questions or are we ready to move on to Georgia?

DR. SEDBERRY: Okay, so moving on to Georgia, there are several MPAs off Georgia, reconfigurations of the existing Georgia MPAs, some additional sites off St. Simons and then this one that we've named Fernandina; and so because it was named Fernandina, when I wrote the report from the two workgroup meetings I just assumed it was off of Florida or just started thinking it was off Florida.

As Doug has pointed out, it is half off of Georgia; so there is the boundary between Georgia and Florida showing it cuts that proposed Fernandina MPA right in half. Starting at the north, we have the existing Georgia MPA and a reconfiguration of it to extend it to the west; so the Georgia Extension includes the shelf-edge reef and some point observations where Warsaw grouper had been collected. That is kind of an important site because Warsaw grouper are extremely rare.

I should point out, as Marcel keeps reminding me, that these X's mean that this is where MARMAP or some other – the X's and pluses mean where MARMAP or some other data source caught or observed these species. It doesn't indicate where else they sampled and didn't catch them; so its presence but not absent.

Just because there is not an X, it doesn't mean that we sampled there and didn't find any or that someone sampled there and didn't find any. These are just places where these two species were found. We looked at different reconfigurations besides the Georgia Extension to the west, the Georgia Reconfiguration; and two is recommended. It is includes one point observation from headboats; so, again, that's not a very accurate location.

The Georgia MPA Reconfiguration to the south includes a lot of speckled hind and a few Warsaw grouper locations. These are MARMAP spawning locations. Again, just like I showed off of North Carolina, these are areas where spawning reef fish have been collected by MARMAP; not the two groupers of interest but other spawning reef fish. Again, it's thought that many species spawn in the same location.

Nick had also thrown in a few other things here that I don't even know if I want to touch on them; but the expert working group did not discuss these other configurations, but the council can consider other different kinds of configurations to include some of these spawning locations, and they can with any of these sites.

Moving south along that shelf-edge reef, when you get off St. Simons, there are a large number of speckled hind sighting locations. Again, we had two options we looked at off St. Simons; and the recommended one is the southern one. This shows the depth contours, the bathymetry along with the speckled hind and Warsaw grouper observation points; a lot of speckled hind observation points and a few Warsaw grouper.

The commercial fishing displacement, as Mike just explained, these colors indicate the percent of potential landings lost – a percent of the total regional landings lost if bottom fishing is prohibited in these areas; so a little bit higher than North Carolina, but not as high as it was off South Carolina. This is the same kind of map for the headboat data; again showing 1 to 2 percent or less than 1 percent loss of reef fish species other than Warsaw grouper and speckled hind if fishing is not allowed in the proposed Georgia MPAs.

These data again are in the presentation in the briefing book and also in the spreadsheet giving the total square miles of each area, what spawning species occur there – again, in this case it is snapper grouper species but not either of the species of concern – the percent of habitat and percent of stock that would be protected in the MPA; and then the percent of the regional catch reduction that would happen as a result of prohibited bottom fishing in these areas; and the same data with the percent reduction of landings presented graphically.

Moving on to East Florida, this is where we pick up Fernandina, which is half in Georgia. We have the Fernandina MPA; the existing North Florida MPA with some reconfiguration; the one off of St. Augustine; Daytona Steeples; Daytona Ledge; some closed areas proposed for the oculina; Experimental Closed Area; and then when you get off South Florida, Push Button Hill, St. Lucie Hump and Juno Beach. Moving on down into the Florida Keys area, there is one place proposed, Warsaw Hole, that has reported a spawning location for Warsaw grouper.

For the Fernandina MPA, again we have some of the Navy – I guess this is the Navy bathymetry; many speckled hind occurrence points in the Fernandina MPA and a few Warsaw grouper as

well that actually overlap there. The existing North Florida MPA has speckled hind and Warsaw grouper points. Moving down to St. Augustine, two configurations of the proposed St. Augustine MPA; St Augustine and an extension to it include both speckled hind and Warsaw grouper collection points.

The areas that are inside the Oculina Coral Habitat Area of Particular Concern; I think the boundaries of that have been altered since we first proposed these MPAs; and so, for example, the Daytona Steeples MPA that the expert working group proposed no longer lines up with the boundaries of the Coral HAPC; and we would suggest that if these are adopted, that they line up so that there is sort of reduced confusion over those two kinds of protected areas.

We have speckled hind and a few Warsaw grouper locations in these areas. South Florida Push Button Hill has Warsaw grouper reports. The existing St. Lucie Hump is there; there are some reports of both species just outside the boundary of that; and then reports of Warsaw grouper in the proposed Juno Beach MPA.

These are the St. Lucie Hump and Push Button Hill proposed MPAs with the colored bathymetry shown. There is a wreck inside the Push Button Hill Site, which can be important particularly for Warsaw grouper and a possible aggregation site reported by fishermen in Push Button Hill as well. Then finally in South Florida, in the Keys, there is the Warsaw Hole with several reports of spawning Warsaw grouper within this area.

The fishing displacement, starting at the north at the Fernandina MPA, on the western edge of that there can be a quite high loss of commercial landings. Then as you move down to the south, it becomes less and less; and the same way for the sites in the Florida Keys, the Warsaw Hole. The recreational headboat loss would be in the lower percentage range for Fernandina, St. Augustine, the Daytona Ledge and Steeples areas as well as Push Button Hill and the more southern ones.

Again, the summary table includes the area for each of these MPAs, what is spawning in these MPAs; and again it is mostly snapper grouper species, very few records of spawning Warsaw grouper or speckled hind with the exception of the Warsaw Hole in the Florida Keys; the percent of habitat that would be protected in each MPA; the percent of the stock for both species using two different models; and then the displacement of recreational and headboat catches.

Again shown graphically the Fernandina MPA seems to have the most potential loss of catch of other species besides speckled hind and Warsaw grouper. Then one final summary table that shows the status quo, the existing Amendment 14 MPAs, what the expert working group has recommended adding on to that; and according to the models that Nick has calculated, we would get several times the protection for speckled hind. The protection levels would be about twice as high as the closed area, more or less. So for closing 1.8 percent more closed area, you get 3.4 percent more protection for speckled hind and 2.9 percent for Warsaw grouper.

DR. DUVAL: Are there questions for George? Rusty.

MR. HUDSON: A clarification; the Daytona Steeples and Daytona Ledge are occurrence areas for speckled hind and Warsaw for the Ledge; and only for speckled hind in the Steeples. The

depth is 240 foot; the western edge of the proposed oculina expansion is 70 meters – I believe that's 228 foot – so you do actually still have them contained inside the oculina expansion, which will take us from about 300 and something square miles up to about 600 and something square miles.

DR. SEDBERRY: Okay, thanks. I just mentioned that because if these are given further consideration, it would be wise to line the eastern and western boundaries with the expanded HAPCs.

MR. BELL: I'm not sure George is the best person, but talking about these percentages of reduction of catch and all – maybe that is a Mike question – so the way that is expressed, if excluded from this area, you would lose an estimated percentage of the overall catch of a particular species.

I know we don't have the resolution to do this in terms of the reporting, but what we're really talking about is what goes on along this shelf-break area or this system we're following; and so if you're a fisherman and that is where you fish yourself and that's where you get that particular species, it could be a much bigger percentage exclusion for you, because you don't fish in these other areas where those fish are harvested.

So it is kind of an apples and apples comparison or proper percentage is if you envisioned this sort of band of a particular habitat and the fishing that occurs on this particular system, what percentage would you be losing from that particular fishery? I know given the boxes and all, it is probably really, really – I mean, we probably couldn't figure that out, but that is why the percentages seem so low to people. If you're the fisherman that goes to that site and that's where you're getting all your fish, it is a much larger loss for you or the guys that would work this and not everybody fishes on that system. Do you see where I'm getting at?

DR. LARKIN: Yes, you're right. Let me give you an example. Again, greater amberjack, if you have 1.1 million caught a year, but in here let's put this MPA in so that removes 8,000 pounds. Well, now that's less than 1 percent of the percent reduction, but that might be – you know, two fishermen may each get 4,000 pounds and that's a hundred percent of their catch. So, you're right, localized impacts are much greater than I guess the global impacts. I say global meaning the whole South Atlantic Region. Yes, I agree with you.

MR. BELL: So that's why they react to those really, really low percentages. They're going, man!

DR. LARKIN: Yes, you're right, but I also want to point out we're under the assumption, okay, you put this grid over the landings – and I'm not trying to speculate; but in reality if you closed Site A, well, then they might just fish in Site B and they still could get their landings. I shouldn't be speculating here; but, you're right, we're closing off that Site A and then they could still get their landings in Site B. But we're under the assumption, okay, close off Site A, those landings are gone; and, okay, get rid of those 8,000 pounds, how is that relative to the total South Atlantic landings? So, you're right, the local impacts could potentially be greater.

DR SEDBERRY: And all that is in the data base. I think you could use the same spreadsheet and decision tool and just reduce the area that you're looking at and just consider it off of each state and calculate it that way. The same assumptions that went into Nick's model would still apply. I would have to get him to look at this to see if those assumptions would still be valid.

MR. HARTIG: Can you go to that last slide, EWG recommendations versus status quo, and just go through that so I'm crystal clear on what all that means.

DR. SEDBERRY: I will try to do it as best I can. The status quo is the Amendment 14 MPAs as they are now; so 769 square miles of area closed. If we adopt all the recommended MPAs, that would be a total of 1,362 square miles; increasing closed areas 593. According to the geographic distribution model that Nick developed, that would protect 3.4 times – the protection for speckled hind would be 3.4 times what it is now in the Amendment 14 MPAs; 2.9 times what it is now for Warsaw grouper with only doubling essentially the amount of closed area. So by doubling the amount of closed area, you get 3.4 times the protection for speckled hind.

MR. BOWEN: I'm just going to restate the obvious. In order to have discard mortality, first we must have effort; and if we're just reducing – I mean if the effort is 0.1 percent for the headboat across the region of this area, it doesn't seem to me that implementing these are eliminating discard mortality because we don't have a lot of effort to begin with. Am I assuming that right?

DR. DUVAL: I think part of it is it is not effort; it is landings that are included in Nick's analysis in terms of displacement. It is landings; it is not like hours I don't think.

DR. LARKIN: Well, you're right, there are three things going on here. Okay, we've got the percent impacts, which is the headboat and the commercial landings; and we talked about that, how they're really low because you look at it for the whole area; as well as there are the two models also; so it is not just I guess the fishing impact but also the habitat, what is the percentage of the habitat you're protecting; as well as the second model, which is what is the percentage of the stock that you're protecting; which is what George was going through there.

So, really, you kind of have to balance all three and not just the fishing impacts, but also how much of the habitat and the stock you're protecting as well. I think you're getting at the fishing impacts, but there is also the habitat and the percentage of the stock as well.

MS. McCAWLEY: Back on the same table that Ben was asking about; why at the bottom where it says "status quo versus recommended" – and the status quo closed area is 769; but if you look up to the top part, the status quo in that first box is 1,272. I'm confused as to why those numbers don't match up; and the same thing with the expert working group recommendations, it is 1,865 up top and it's 1,362 at the bottom.

DR. SEDBERRY: That's an excellent question.

DR. DUVAL: I've got hands going up all over the place here; so a followup, Jessica.

MS. McCAWLEY: This was actually a separate question. It was unclear to me when we were going through the PowerPoint; I didn't see on the Florida suggested MPAs – like in the other states it would have the little blue word "recommended" when you look at the map. I did not see that on any of the Florida ones; so does that mean that none of the Florida ones are recommended or those words are just not on the maps?

DR. SEDBERRY: That means that they're all recommended.

MR. BELL: So one reason for the difference in the numbers could be that remember the Charleston Deep was not recommended. It is already part of status quo and maybe that's why it is less. Then there was the adjustment of the Snowy Wreck in terms of recommendations versus what is in existence. I don't have the numbers, but that might explain some of the difference there. That wasn't my question.

Up on the one we were looking at where it says "percent habitat 12" and then "27"; state quo is 12; recommendation is 27. That is percent of – like for speckled hind and Warsaw, that is the percent of just that type of habitat out there or all habitat where speckled hind of Warsaw might be. What is that a percentage of; just that deepwater band or –

DR. SEDBERRY: The way I understood this is that it's 12 percent of the habitat between 25 and 200 fathoms that was hard or probably hard within the SEAMAP data base. Is that about right, Mike?

DR. LARKIN: Yes. My understanding was that probable habitat. There is like the known and the probable, but probable for Warsaw and speckled hind.

DR. SEDBERRY: And I don't have an explanation for why the areas differ between the top and the bottom, but I will get it. I will look back in my notes.

MR. HAYMANS: I have been pondering over Jessica's question for 20 minutes as to why that was different; and Jessica asked the same as she asked the horse before the – but I was simply wanting to tell George the difference was the same between the areas. That's all.

DR. SEDBERRY: In terms of percentage it is the same.

MR. HAYMANS: Well, the 593 square mile increase in closed area; the difference between 1,865 and 1,272 is the same as 1,362 and 769; and so somewhere there is –

DR. DUVAL: Yes, I understand. Does everybody understand what Doug was saying; so 1,865 on the upper table expert workgroup recommendations minus status quo of 1,272 equals 500 and whatever number you cited; and it is the same thing in the lower table, the difference between status quo and expert workgroup numbers are the same; so there is some site in there that is two sites not being included somewhere. It could be, as Mel mentioned, the Snowy Wreck Site had multiple reconfigurations that squeezed it down to like 18 square miles or something like that. That might be some piece of it. Robert.

MR. JOHNSON: Have you run any numbers that are cumulative on these fish; like take all the MPAs and the percentage from the whole fishery added together?

DR. LARKIN: I'm trying to understand your question. I mean that's what we –

MR. JOHNSON: Is that what that shows, the total reduction in the fishery?

DR. LARKIN: Yes; actually we pulled landings from the most recent three years and then looked at the landings in each individual grid relative to all the landings. Is that your question, if we added all the grids together?

MR. JOHNSON: Right.

DR. LARKIN: So you're looking for the percent reductions. Well, yes, if you go that spreadsheet I gave yesterday – well, I guess it depends on which ones you choose; but, yes, if you choose all the MPAs that were recommended by the expert working group and then if you go down to Row 29 in the excel spreadsheet, I can show you but it does actually – that yellow row there, it already does provide the cumulative percent reductions for – if you choose all the expert working group MPAs, yes, it does.

MR. JOHNSON: And just one other point; when you were talking about the 4.2 percent reduction or when you were talking about the coverage of the increase, I think it was, and you said 25 to 100 fathoms; well, as a fisherman I know there are a lot of areas in 25 fathoms that are devoid of fish. I think you're getting a lot more bang for your buck than your numbers are saying. I don't know if you follow me, but there are a lot of areas that don't have fish.

DR. LARKIN: A lot of the areas that are defined as hard bottom could still be completely devoid of fish is what you're saying. It is not only the depth but also how – we used, I believe it was the SEAMAP and how they classified the bottom as well.

DR. SEDBERRY: And I think I have an explanation for why those numbers differ on the bottom and the top; and there is a footnote there, the asterisk. The estimates on the bottom there do not include the Coral Habitat Area of Particular Concern, the Oculina Expansion. If you include that; what Nick said was because you can't anchor there, efficiency is reduced by 50 percent.

MS. BECKWITH: Having pondered all of this, I would propose kind of a – and this is not a motion and just for discussion – I would kind of propose going forward potentially to scoping in January with just the reconfigurations that we've discussed multiple times. I feel like discussing the reconfigurations with the additional information that we now have is probably a respectable and responsible move to take forth.

I don't feel necessarily that is going to be as much of an impact during visioning; so if we bring forward the discussion of spatial management to our visioning folks and what we're presenting is, hey, we have these spots already. We have figured out some new information; and by

changing these in these particular ways we might get more bang for our buck out of these spatial management areas.

Some will be smaller; some will be bigger; some will protect better known habitat. Then that might be a fairly positive discussion during visioning. If we just move forward the reconfiguration options, I would still like to see our AP reconsider with all of this additional information the other proposed spots at their April meeting and have those recommendations come back to us; at which point if we decided to send out any additional proposed spots, those could go out in August. That would be my suggestion for a way forward.

MR. PHILLIPS: Back to the percentage of habitat, I scrolled a few slides down and noticed that most of the speckled hind were inside of 60 fathoms and most of the Warsaw were probably inside of 50 but some all the way out to a hundred. The percentage of habitat where most of the fish are is a different number from the total amount of habitat, if you understand what I'm saying. Where these MPAs are is where most of the fish are and not the whole habitat range.

DR. SEDBERRY: Yes, I think I understand what you're saying, and I would have to look back into Nick's paper to see what he did there. I know that he looked at the depth range of 25 to a hundred fathoms, but then said that the fish were concentrated between I think 35 and 45 or something like that. What he actually used in the model, I am not sure. I would have to look.

DR. LARKIN: I just want to point out if you did want to actually explore or separate from just what the habitat is and known, meaning over the point counts where these two species are found – if you go back to that council decision tool, from that excel spreadsheet that we gave you, it actually breaks it up by known, meaning point counts, where exactly were they found and also – and there is another column next to it for the known and probable. If you want to just look at where they were found or if you want to look at where were they found as well as other potential habitats, I just wanted to make that clear if you want to explore that, we certainly have that information available in that excel spreadsheet.

MR. PHILLIPS: And it's great to know where we have seen them, but there are just so many places that just have not been checked. I'm skeptical of using that tool. I'm more inclined to be a little bit more habitat based and working from there.

DR. SEDBERRY: The expert working group was concerned about, too. Just because we're not seeing them someplace now, it doesn't mean that they weren't at one time there. The example was given off North Carolina where speckled hind was the most abundant grouper in the seventies and ranked in the top five most abundant reef fish and now ranks near the bottom.

Where were they historically? MARMAP has really concentrated on sampling these fish after they became undergoing overfishing, and so maybe there was some historical data that we're missing and we haven't looked in all the places. Again, as Marcel pointed out, I need to emphasize more that those points are where they have been collected and it doesn't include everywhere that we looked; and we haven't looked everywhere.

DR. REICHERT: That was exactly the point that I was trying to make. It is very important that if you want to interpret the X's and the pluses is that you overlay that in your mind with the MARMAP and other sampling efforts, because that is where we sampled, but we didn't sample everywhere. There is habitat available out there that may have occurrences that we don't know about, and that I think was one of the things that Mike mentioned and that George mentioned earlier.

DR. DUVAL: I have Doug and then Jessica and Mel, and we need to get to a decision point. We have still got a lot of other business on our agenda here. I am just reminding folks of that.

MR. HAYMANS: To Anna's suggestion, maybe it is fine, but I just noticed there is not a reconfiguration in Florida. There is an extension of one of the Oculina HAPCs, but most of that is included I think already. There would be a reconfiguration in the other three but not in Florida.

MS. McCAWLEY: Well, I would like to respond to Anna; but first to Doug's point, I don't see a reconfiguration for Georgia, but maybe I'm looking at the wrong table.

MR. HAYMANS: Yes; it is Option 3, Subalternative 2A.

MS. McCAWLEY: Okay; back to Anna's point, I had a procedural question. If we were to go that route, would this actually have to be split in two amendments? You'd have to do this in separate amendments to move this forward because you'd only be moving a piece forward; and if you were going to come back later and try to rescope and go through a whole other process; is this two separate amendments now; is that how it would work?

DR. DUVAL: And that was a question I have for Gregg is if you go out to scoping with reconfigurations only and then you decide you want to add more later; does that mean you start all the way back at the scoping level?

MR. WAUGH: Yes; you would have to. Let me clarify one thing. Under Georgia, there are no reconfiguration sites. There is one that is called a reconfiguration, but it wasn't a reconfiguration. That is why if you see Alternative 3 with reconfiguration sites, it is yellow and strike through.

MS. McCAWLEY: If you look at the tables that are towards the end of that Attachment 5F, that is where I was getting the information that there aren't reconfigurations, if you look at those tables.

DR. DUVAL: Attachment 5F is actually the scoping document, just for everyone's knowledge.

DR. CRABTREE: Normally with scoping you would go out with the broadest range of things you're considering; and then after scoping, you would narrow it down as put together a public hearing draft. It is a little early to start narrowing the scope of things.

MS. SMIT-BRUNELLO: And just so you know, for what it's worth, today I think in the Federal Register the Notice of Intent to prepare a Draft Environmental Impact Statement was published for this amendment; and in it, it said the council intends to consider alternatives to modify existing MPAs and establish new MPAs.

Then it gave the dates and times and locations for the scoping. That doesn't mean we can't publish something that says this is a correction to Notice of Intent that we just published; but just let you know that just went out today, because that is the direction we thought you were all going. We wanted to give the public enough notice so they make plans to attend the meetings.

MR. CUPKA: What you're talking about now is what I had originally proposed I think if you go back several meetings – I believe it was at the Raleigh meeting – when I made a motion that our first step would be to look at reconfigurations. Somewhere along the line it got changed from reconfiguration to include new areas as well. This was the intent probably a year or so ago or maybe even longer originally, and it got changed along the way.

DR. DUVAL: I think it was actually at the June council meeting a year ago that motion was made because I had not taken over as Snapper Grouper Committee Chair. I think it was still Mac, and I'm pretty sure that is where that motion was made and then it just kind of morphed.

MR. BELL: And to that, too, if you go back to the document we have on Amendment 11, it says in there that for purposes of this amendment the council will use these studies – and it's talking about the work that was going to be done – to determine whether a change in the size and/or configuration of the existing MPAs is needed to increase biological benefits to deepwater snapper grouper species, particularly speckled hind and Warsaw grouper. That was kind of the intention that David was describing and then it kind of expanded a little beyond that in terms of what we asked the working group to do.

DR. DUVAL: So, Committee, what is your pleasure? Anna has proposed for discussion going out to scoping with only reconfigurations. There is no reconfiguration for any of the Florida MPAs. There are only new boxes. We could go out to scoping with everything in the document that is currently included in the different alternatives under each state. We could do some subset of that. Zack.

MR. BOWEN: Madam Chair, again, I feel that when fishermen think that we're cutting their bottom or taking stuff away from them, whether we're taking a little bit or reconfiguring it, and it goes ahead of our visioning, it is going to leave a very bad taste in their mouth. I don't think there is any way we can avoid that. Whether we move this forward and try to reconfigure, it is going to hurt our visioning process or the input that we get for our visioning process.

MS. BECKWITH: I think I'm going to stand by my original desire to take this out to scoping in August and between now and August I would like to work with Nick and Mike and see if we can get some different methodologies put together for looking at that percentage impact, including some of the ideas that were discussed here. I think that would make a more informed decision, and I don't see it being that hard to kind of take the boxes around that particular set of habitat down – well, we can think of something.

DR. LANEY: Madam Chairman, I'm not on your committee nor do I get to vote on this issue or make a motion on this one; but I will tell you what I would do if I did have that opportunity. After having listened to all of the discussion and having some more discussion shortly after lunch, I go back to the point Ben made earlier, which is that we're here where we are – the council is here where it is because of the 240 Closure and subsequent events.

This council has a reputation among all the councils I think of being known for its progressive actions with regard to habitat. After all, habitat is where it's at. If there is common ground between recreational and commercial and people who don't fish at all but just like to watch fish, it's the habitat. I think the council is in a position where it needs to do something to address speckled hind and Warsaw grouper and snowies as well.

The point was made to me that it is not like this discussion is a new discussion. The council has been talking about reconfigurations and MPAs for several years; so I don't know that it would have that big of an impact on the visioning process. I think it puts something out there that will certainly garner a lot of public interest and input; but the visioning process is still going to go forward and commenters will have an opportunity to discuss how they feel about MPAs in that process. This gives them something specific to shoot at, so I would support just going ahead and taking the whole thing out there and letting people have their say about them.

MR. BELL: I'm concerned about impacts on the visioning process, but this is already sort of out there hanging. The boxes are already drawn. One potential benefit in moving forward with the scoping and just covering everything – because I think it would be a little difficult to sort of separate at this point reconfigurations versus just the boxes that exist in ink right now – but one potential benefit could be that we can, through this scoping, clarify with the public what this really is; these boxes are not all going to happen, there is no intention to make them all happen.

There is a lot of misconception floating around out there with the public; and that happens. As soon as you draw the box on the chart; that is somebody's favorite fishing spot. Every one of those boxes is more than a small percentage of somebody's favorite spot, probably. If in the scoping process we can help clarify what this really is, this is not something that is going to definitely happen.

Just because it looks like there are a lot of boxes on the chart, that doesn't mean that all of a sudden all of this is going to just automatically happen. If we can do that, it might help sort of defuse this a little bit until we are the point when we get to the actual visioning, it is somewhat defused if we can pull that off.

The danger is if you can't pull that off, then you're just going to hear a whole lot of screaming and hollering about all those boxes that are still on the charts during the visioning. It could work; it is all in how the scoping is structured and how that moves forward and how the public perceives it. But I am concerned about both processes and I can see where – I'm a little worried about them conflicting.

MR. CONKLIN: To Mel's point, it would be nice if we could do that, but I don't see it as being realistic. It's wishful thinking, Mel. Even if we sent this reconfiguration out to scoping, the

reality of it is that if we take a box and move it based on – if we don't have enough information or I don't feel like we do to create a new spot or if we have enough to lengthen it or making it shorter or anything, we're still going to be closing down new areas of bottom even if we reconfigure.

MS. McCAWLEY: I was just going to say I stand by the comments I made earlier that I just don't think we should go forward to scoping right now. It is going to affect the visioning and we need to move those things away from each other. Otherwise, I just think we're going to spending way too much money and time and effort on this visioning process, and I don't think it is going to be successful. I stand by my earlier comments.

MR. HAYMANS: To Wilson's point, I think the reason this council struggles is that we don't have a clear-cut definition of success for the current MPAs. We have seen all the data out there and we see the differences between inside the box and outside the box, but we really don't know how successful those are. I don't think many of us want to go forward with anything to public scoping when we can't explain to the public how well the ones we've got are working. Your analogy about the deer and the high fences, it is not like you're tagging a deer and tagging the anglers. I'm getting tied up on that one**. I would be willing to make a motion to table this amendment indefinitely.**

MR. BOWEN: And I would second that.

MS. McCAWLEY: I thought that you had to table an amendment to a date certain or a time certain.

MR. HAYMANS: I went and read Roberts' Rules and you can do it either way. If you have got a certain point where you want to bring it back up, you can do it indefinitely because I don't know when we're coming back with the rest of the visioning document.

DR. DUVAL: Was that a motion?

MR. HAYMANS: Yes, ma'am; a motion to table definitely.

DR. DUVAL: There is a motion by Doug to table Regulatory Amendment 17 indefinitely and seconded by Zack. Discussion on the motion? Wilson.

DR. LANEY: I wasn't prepared to discuss the motion. I was going to make two more points. One is that I do agree with concerns raised by folks around the table that the AP needs to see all the information that the council has received today. I think it's important that they see that even if you have to send it out to them by e-mail and you don't have an AP meeting.

The second point is once again I think the council should consider carefully before it delays here the fact that what you're really talking about may have – certainly will have an economic impact on somebody; somebody's ox is going to get gored. But, in the long term; what you're looking at is the long-term sustainability and viability of the fishery.

Again, when you set aside habitat that can be productive and eliminate the mortality that may occur within that habitat, then you're looking out for the long term and you're basically creating a long-term investment for yourself, for the long-term sustainability of the fishery. That is why you protect habitat in the first place; that's why we have National Wildlife Refuges and National Parks. That's all I have to say about it.

MS. McCAWLEY: I was going to say that I would vote in favor of this motion.

MR. HARTIG: I would speak against the motion. I think there is a lot of information here that we need to bring before the AP. And, yes, there are a lot of doubts in our minds about how we can move forward, but I think first we need to bounce off the AP all this information we have. They're more closer to the public I think in some instances than we are. Then we'll get an informed judgment about what they think about it, and then I think we can make a better judgment about how we move forward from there.

DR. CRABTREE: Well, I think Ben makes a good point there. To me this motion goes too far. I think we've seen a lot to indicate that there would be benefits to some reconfigurations of these MPAs we have in place, and you could probably do that without really closing anymore bottom and just some shifts. It just seems to me too soon to decide we're not going to do any of that. I understand the concerns about new MPAs, and that is something you need to decide. But, after all we've put into this to say we're not going any further at this point I think is too far.

MR. JOHNSON: Well, the AP would certainly be glad to look at any additional – we have already looked at a lot. I do know on the AP level Mark Brown was involved in this, and there was a little bit of confusion because I think a lot of the fishermen that were involved in this whole process thought they were going into the process to look at reconfiguring existing MPAs.

There was like a shock when this thing got finished, and they saw all those new boxes, among some of the workgroup participants. I know that for a fact so I think maybe you're on the right track with the reconfiguring. I'm sort of like Roy and Ben, I hate to see you just to scrap the whole thing.

DR. DUVAL: And just to bring up Mel's point again that the record for Regulatory Amendment 11 states that we were going to go back and look at reconfiguring existing marine protected areas in order to examine whether or not they would provide additional protection for these two species. I just want to make sure everybody is reminded of that. Doug.

MR. HAYMANS: My motion is not to kill it indefinitely; it is to postpone it beyond – let me explain what I'm interested in doing and maybe we will figure out the right wording from there. It is to postpone us beyond visioning. I saw the August 8, and I don't know that we're going to have results of that whole process.

We can continue to work on it but not to take it out to public scoping until that time. It is not kill it; that is not my intention is to kill it because there are a few of these areas that I think we could work with as well. Because I don't have a date in mind, I don't know what I mean with regards to when. How about postpone Regulation Amendment 17 until after the results of visioning.

DR. DUVAL: I'm not sure that actually gets you on any firmer footing. The plan was to conduct port meetings for visioning this winter and spring; hopefully between February and, say, May; and it is going to take a little bit of time to process that. I'm not sure until after results from visioning; does that mean June, does that mean August; what does that mean?

MR. HAYMANS: I think that means the final report from the visioning process. We're going to have something that comes out of this that is in the form of a report, right?

DR. DUVAL: Yes, we will have reports from the port meetings. Gregg.

MR. WAUGH: Just for some clarification; is it once we conduct them and then provide you all a report or is it after you all then take that and define what your vision is?

MR. HAYMANS: Correct; it is the latter.

DR. DUVAL: That could be pretty lengthy. I just wanted folks to be aware of what the intent of the motion versus what it would actually do. Zack.

MR. BOWEN: Dr. Crabtree, in no way did I mean – I think you used the term "start over with this." There has been an awful lot of thought, the process and hard work that has gone into this. That is not what I meant by my seconding of that motion at all is to start over. I don't think we need to start over. Like Doug said, I think we need to postpone this – again for lack of knowing a date, I am going to say a little while, but not to start over.

DR. CRABTREE: Well, thanks, Zack. I understand your motion a lot better now; but I just don't know what we gain by postponing or delaying. It would bother me, Doug, to say we're going to keep working on this. It seems to me if we're going to work on it, we have an obligation to go ahead and scope it and see what the public thinks and let them know.

I'm not that comfortable with continue to work on something and putting off scoping just because we know it is going to be controversial and people are going to have a lot to say about it. It seems to me if this is something we're contemplating, then we kind of have an obligation to go ahead and scope it and give the public an opportunity to have their say on it. I think whether we scope it or not, when you go out to these visioning meetings, if we're still talking about this, they're going to talk about it one way or another.

MR. BOWEN: I don't think we're contemplating the new boxes anymore. I think we're contemplating reconfiguring the current boxes.

DR. DUVAL: There is no motion on the table with regard to just reconfiguring the current boxes. This motion that you have up here states to just postpone consideration of this amendment until pretty much at least the end of the year, until we get some kind of report back. That doesn't say anything about considering reconfigured areas.

What I have heard around the table, people are very concerned about the potential impacts of moving forward with scoping on visioning. I don't disagree with that. There has been concern

voiced about the fact that the advisory panel really didn't have the benefit of the presentations that we've received today and that it would certainly be a good idea for them to receive those presentations.

The other thing we've heard a lot of concern about is the impacts' table; and that even though the impacts' table was developed looking at 25 to a hundred fathoms and constrains the potential loss of fishing opportunity in other areas to that; that really we're taking landings from a fairly large grid and spreading them over that area when we know that landings are not spread equally throughout that area.

Nick has made that clear in that particular table and in his paper; and we know that is just not the way the fishery works; so it seems like there is also a lot of concern about being as clear and truthful as we can with the public about what those potential impacts would be. Am I clarifying the concerns I'm hearing from the committee around the table? Is there any relevant comment on this motion, because I really do think we need to come to a vote? Mel.

MR. BELL: I was trying to figure out a way where we could somehow have additional reconfigurations or something, but it doesn't sound like that is reasonable at this point. In terms of the motion as it exists, I'm not real comfortable with that.

DR. DUVAL: Let's go ahead and vote. **The motion reads postpone Regulatory Amendment 17 until after the results for visioning are available and the council develops their vision. Could I please see a show of hands of those in favor of the motion; four in favor. Can I see a show of hands of those opposed; seven opposed. The motion fails.**

We still need to make a decision about the direction that we want to take. Would we want to do something to make sure that the advisory panel sees the presentations that we've had the benefit of seeing? Would you want to modify the timeline that we've moved down? John.

MR. JOLLEY: I'm not on your committee and I'm going to disagree with my wonderful colleague next to me. I agree I think with Roy and Wilson. I think we're blowing too much smoke on this concern about the visioning process. I do have a question. If you do delay or restructure this whole thing, how much more work is that going to be for staff? They've already got a full load.

MR. WAUGH: Well, when we get to Executive Finance you will see we've got 24 amendments that you will have to give us priority on; so deferring one of them isn't going save any time in the end. It is just picking where we work. If we work on this now, it will take some more work. You would have to rank that higher in your priority and we do more work at the front of the year on this, and that will cost us time on something else. Whether you take it out to scoping now or August, the net amount of work is going to be the same.

MR. PHILLIPS: Considering the issues that we've had with the reports, the AP have seen an awful lot of stuff. I don't know how much they would really change things; but some of those formulas aren't correct. They need some work. Now, how much it would help, personally I

would see probably some benefit for the AP to look at it again and then bring us back some recommendations after these presentations that we saw.

DR. DUVAL: Well, we indicated to the advisory panel that should we maintain the schedule that we agreed upon at the last meeting of going out to scoping in January and public hearings in August that they would be reviewing the results of scoping at their April meeting. They would certainly be privy to all these presentations that we received. Those could be included in the briefing book. Gregg has told me that Roger does have an alternate means of looking at what impacts would be from the different areas done in a similar manner as I think was done for the Amendment 14 MPAs. Is that correct?

MR. WAUGH: That's correct; and if you look at the bottom of Page 6 of the scoping document, it lays out material from Amendment 14 on how impacts were done in Amendment 14. We ended up presenting information by the large statistical grids as well as a Delphi Study. What we've got now is for Regulatory Amendment 17 – and this is on Page 7 – the region has this model. The center has reviewed that and concurred that is the appropriate methodology to measure the impacts of proposed MPAs in Regulatory Amendment 17.

We presented those impacts to the AP and they objected, saying that they significantly underestimate the impacts. We have charts similar to what was done for when we got into red snapper, averaging some of the catches by statistical grid. I can show a couple of those. We've got them for the headboat data and the logbook data. I think these have been sent around to you as well.

What this shows is you can go in and Roger has added the existing and proposed sites; and you can look at these – for instance, this one shows red snapper catch, Warsaw grouper catch, speckled hind, black grouper, red grouper and then total snapper grouper species in that statistical grid.

These I think are average 2005 through 2007; so we would need to update this information. If we are going out to scoping, we would like to be able to use charts like this and show an alternate to the model that the region has developed, showing what the catches are within these grids of major species and get input from the fishermen in terms of how much of those catches do they feel is coming from the proposed MPA sites. As I said, this is for headboat. We've got it for logbook and it can be done partitioning the MRFSS as well.

DR. CRABTREE: I think we're much further along in developing this than we would normally be before we go to scoping. We've gone to scoping with much more general concepts and things than we have now, so we're at a point where – and I think we just decided we're going to continue to move forward with this. We're at a time when it is time to go out and go to scoping with it, and I think we have plenty of information and material for them to go out and inform the public at this level. It seems to me it's time to go ahead and do that.

MR. PHILLIPS: And that, Madam Chair, is my motion. Let Gregg add what he can to it and let's go ahead and take this to scoping and bring it back. The AP will look at the scoping comments when they look at this again and make sure that the public understands this is a tool; it

is a dead-done thing. We want their comments and let's go ahead and go with it. That's my motion.

DR. DUVAL: **There is a motion by Charlie to take all alternatives to scoping in January and have the AP receive the presentations and provide their recommendations to the council at our June meeting.** Is there a second; seconded by Ben. Discussion? I think everybody is discussed out. Mr. Executive Director, would you like to make a comment, please?

MR. MAHOOD: Well, I was just debating whether to make a comment or not. To kind of reiterate what Gregg said, the problem with going out to scoping with information that says there is no impact on the fishermen when you know the fishermen know there is impact on them, it is not going to be friendly input session.

We're already starting with the premise that they'll look at this information and say, "They don't even think there is any impact on us." We've talked about this at the staff level and that is kind of problematic. I don't know how Robert may react to that if he was a fisherman. What Gregg was saying is there another methodology that is being explored.

Now, I don't know, Gregg, what the timing is and if we could include that information prior to the scoping, whether that will be available or not. I have been to these meetings when we did them before and had to dig Gregg out of a corner from 15 fishermen ready to kick his butt. When you go and you tell people things that they know are not true, it just destroys your credibility.

MS. BECKWITH: Yes, for all of those reasons I feel like – if Charlie allows me, I would like to put a friendly amendment to change the scoping to August and that will just give us a little bit more time to get that information into the document. It is not like this information isn't going to be available for discussion. People have seen it. I just think let's get that proper impact information in there and take it out to scoping in August. We're not delaying that much.

MR. HARTIG: Well, I felt a little bit better about the impacts when Gregg put his up and you have some kind of comparison there. When I was talking to Mike about the comparisons and about – you know, when I'm looking at these numbers, I just went to Push Button Hill where I fish and where I know what the commercial production is in that area from that inlet; and it is 75 percent of the red porgy for this one spot; 95 percent of the amberjacks; 75 percent of vermilion snapper in past – now, we haven't had that fishery for the last few years for whatever reason, but it was very important – 60 percent of the blueline tile and 20 percent of the gag.

That is just for a few species for that one MPA off of that inlet; and that is just commercial. Now, recreational, the numbers aren't going to be quite as high, but they're only going to be about 10 and maybe 15 percent difference. That spot in particular is so important because it lies right in the middle of two other MPAs.

It is one of the only spots that has the fish; so when you focus on that spot, then you have probably way beyond impacts that may get in other areas where you have areas to fish in

between. Going out to public hearing without a more well-developed way to show the public what the impacts are I think is suicide.

MR. BOWEN: I would so like to echo that sentiment. Then we expect to get public input on visioning after they have received this? We are going to get crucified. Up until this point, I think the public and the fishermen have realized that maybe we have turned the corner a little bit on regulations and things are starting to be better. When this goes to scoping with what we have presented, all the progression that we have made to this point is going to be lost. Again, it's just my opinion.

DR. DUVAL: I certainly think that you can – if you want to postpone scoping, Anna has made that suggestion and I think you can do that. I had Doug, then Mel, then Roy, and we need to clean this up. We are way beyond time and we have a lot of other really important things to do.

MR. HAYMANS: Not that I think it makes a difference, Madam Chair, but I would vote in favor if it said August, but I would vote against it if it said January.

MR. BELL: If it said August, can we then ask the AP to give us additional recommendations for adjusting or reconfiguring existing sites and that sort of thing as part of the tasking to them?

DR. DUVAL: I don't see why we couldn't. They would certainly still have this on their April meeting agenda. I don't see why not. Gregg.

MR. WAUGH: Charlie had asked if we were doing these scoping meetings in January; could we get this information that I projected on charts in order to use it at the scoping meetings. We can definitely using the 2005 through 2007 data because those analyses have already been done. We would have that and it can give a balance – I would think another range of what the impacts could be.

DR. CRABTREE: Well, remember we're not going to public hearings. We're going to scoping meetings. We've often gone out to scoping meetings with just general issues and ideas and concepts and here is the problem we're looking for ways – so I still think we're getting ahead of ourselves. I think we're getting confused on the impacts.

I don't think anyone is saying that this doesn't have economic impacts on fishermen. We haven't done any economic analysis of any of it. If it's coming from the table that showed the effects this has on overall catches or overall discards, that is putting it in a context of the entire South Atlantic Region; but it doesn't mean if you're a fisherman and this is your place that you spend 90 percent of your time fishing that it's not going to have an effect on it. It obviously is; but if you wait until we have a fully analyzed document with all the economic analysis, that is what you go to public hearings with after you've already done the scoping. I think we just need to be clear about that.

DR. LARKIN: I will just make it real quick. It looks like those fishery impacts are hanging up a lot of people. To speak to Ben's point, I wonder if we should do the analysis in terms of the

breakdown of fishery impacts from state by state by state. Would that be better in terms of instead of the whole South Atlantic?

MR. HARTIG: The finer resolutions you could get – I mean, to me commercial grids; what are the analysis of the commercial grids when you close that area in that grid. If you could get that fine scale – and that may be too find, Mike, but some way to have some more reasonable numbers in this. To me, percentages, they're not going to resonate with the public. Pounds are going to resonate with the public and species impacted. I think we should change the whole analysis and go to species-specific impacts from these proposed changes to our MPAs.

MR. PHILLIPS: Well, since Ben seconded, if we could get this done in time for scoping in January, I don't have a problem leaving it in January; but if we need to go August, then August is fine and that will give us time to get it right.

DR. DUVAL: So you're amending your own motion with the consent of the seconder to move these to August?

MR. PHILLIPS: Yes.

DR. DUVAL: **So then the motion would read take all alternatives to scoping in August and have the AP receive the presentations and provide their recommendations to the council at the council's June 2014 meeting. Please tell me there is no more discussion on this motion. Is everybody prepared to vote? Okay, could I please see a show of hands of those in favor of the motion; those opposed. The motion passes ten to one.**

MR. JOHNSON: Is it possible that the AP might see some reconfiguration work done on the regions that there were none as part of what we look at during our next meeting? I know it's not in the document.

DR. DUVAL: I think if the AP wants to suggest some reconfigurations, then you can do that and that would be the input that the council will be looking for. I'm going to suggest that we take a quick ten-break; and then when we come we're going to shuffle the agenda around a little bit.

DR. DUVAL: We've got two more agenda items we've got to get through before our informal listening session tonight. Just to let folks know, we are going to take back up with Regulatory Amendment 16, which deals with the black sea bass pot closure. I think this will go fairly quickly. Then we're actually going to shuffle the agenda around a little bit, and we're going to deal with Amendment 31, which is blueline tilefish, after that.

Hopefully we can get through that and then recess for the day for the listening session. We will take up other agenda items tomorrow morning after consultation with the chairman to see how he wants to schedule that. I'm going to turn things over to Myra to cover Regulatory Amendment 16, and that is Attachment 6 in your briefing book.

MS. BROUWER: This is the scoping document for the amendment that would address the closure of black sea bass pots from November 1st through April 30th to address risks to ESA-

protected whales. The document that I'm going to be using to walk you through it was revised. It should say "revised on 11/25". That is the right version to be looking at.

This looks very similar to what we went over in September. There is a purpose and need that was approved. The proposed action in the amendment is to modify the annual November 1st through April 30th on the use of black sea bass pot gear. We have four alternatives; no action; Alternative 2, which is to remove it. Alternative 3 would prohibit the retention, possession and fishing for black sea bass using pots from November 15th through April 15th.

Alternative 4 would prohibit it only in critical habitat in the South Atlantic Region and you can see the figure right there that outlines what the critical habitat designation for right whales currently is. I'm sorry; there should be five alternatives. This is an alternative that was submitted by the Protected Resources Section of the Regional Office; and that's the reason this document was revised and sent to you after the second briefing book deadline was because they provided the language.

This is the one that you had requested that was developed; and it is based on a depth contour. It reads, "The black sea bass pot closure applies to waters 25 meters or shallower from 29 degrees north, approximately Ponce Inlet Florida to Cape Lookout, North Carolina. From Cape Lookout, North Carolina, north the closure applies to waters under SAFMC management that are shallower than 35 meters. The closure applies to all areas annually from November 1st through April 30th."

According to the Protected Resources folks, this was put together rather quickly, but they wanted it to be available for you guys to look at. Here are the depth contours. The 10-meter contour is in green; the 20 meters is in blue; the 30-meter contour is in red.

DR. DUVAL: Hang on a minute, Myra. Doug.

MR. HAYMANS: I was just going to say real quick, Myra -- and I believe this is right with Alternative 5 – is that it was put together literally the day this document had to go out. The AP, who in a moment I guess you're going to talk about, but didn't have a chance to see that one, right?

MS. BROUWER: That is correct.

MR. HARTIG: Can we ask a question; where is this document again?

DR. DUVAL: This is Attachment 6, but I think it was just posted to the website. It didn't come in the second briefing book.

MS. BROUWER: It was only out on Friday, right before the meeting.

DR. DUVAL: Right in front of it, it says, "SG Reg Amend underscore Scoping Doc 11/25/13"; so if you're scrolling through all of your documents; that is what it's called. It is also on the website so you can pull it off of there as well.

MS. BROUWER: The AP received a very brief presentation like I just gave you, and they discussed it at their meeting in November and recommended Alternative 4 as the preferred. This is the one that the closure would apply only in designate right whale critical habitat in the South Atlantic.

What we were looking for from the committee at this meeting is to discuss the amendment and sure that you're okay with the alternatives as they are, make any modifications as you see fit and then approve it for scoping. This is an amendment that we had originally thought we would scope via webinar; but since we already have scoping meetings coming up in January and there has been a delay in the MPAs Amendment, then we could potentially scope this during that round of meetings as well.

MS. SMIT-BRUNELLO: I have two questions. Myra, so the AP didn't have the current Alternative 5 that we have before us right now. They didn't have that in front of them when they chose their preferred; is that correct?

MS. BROUWER: That is correct.

MS. SMIT-BRUNELLO: Okay; and then the other thing is that the Notice of Intent to create a DEIS for this amendment also got published today. It has the dates and times and location of scoping for your January scoping sessions.

DR. DUVAL: I guess that means, Monica, since that has been published, that it's scoping at in-person meetings at those locations?

MS. SMIT-BRUNELLO: I believe so; I'll double-check the scoping notice.

MR. STEELE: Madam Chairman, I just got a note from our Protected Resources folks letting us know that they'll be here at the January council meeting to discuss the alternative that they've provided, Alternative Number 5, and describe how it was developed. They will be on hand in January.

DR. DUVAL: Do you mean the January Scoping Meetings or do you mean our March council meeting?

MR. STEELE: At the March council meeting.

DR. DUVAL: What we need from the committee is really pretty simple; to approve the amendment for scoping. Doug.

MR. HAYMANS: Madam Chair, I'd make a motion that we approve Regulatory Amendment 16 for scoping.

DR. DUVAL: There is a motion by Doug; second by Jessica to approve Regulatory Amendment 16 for scoping. Is there discussion on the motion? Is there any opposition to

that motion? Seeing none; that motion stands approved. There is nothing else that Myra needs from us on that.

As I mentioned when we reconvened, we are going to shift the agenda around a little bit and we're going to deal with Amendment 31, which is blueline tilefish. I have asked Vice-Chair McCawley if she would please lead the discussion on this particular amendment. This is not something that we do very often here at the council table.

It happens much more often at the Atlantic States Marine Fisheries Commission where a committee chair may step down to speak with their delegation. I think everyone is aware that the blueline tilefish fishery is a very important fishery to North Carolina; and I just don't feel that it would appropriate for me to try to chair this discussion and make some of the comments that I would like to make. I have asked Jessica if she would lead that discussion.

MS. SMIT-BRUNELLO: While you're setting up; I'm going to jump in here. The Notice of Intent to do a DEIS on Amendment 16 didn't announce the locations and times of scoping. Maybe it is because you were going to do it via webinar. I'm not sure; but it was not like Amendment 17's which announced the locations and dates and times.

MS. McCAWLEY: Okay, Myra, can you go through scoping on Amendment 31 and can you tell us which document you're looking at and which version of the document we should be looking at.

MS. BROUWER: It is Attachment 9. This was actually sent to you in the first briefing book. It has not been revised and there are no updated versions of it. There is only one version. This is the document that I used to conduct the scoping webinar. We scoped this on November 7th, I believe it was. We held a webinar and this is the document that was used.

What I'll do is just walk you through it very quickly just to make sure everybody understands what the issues are, and then I'll briefly touch on some of the comments – summarize I guess the comments that we received, which were very few. As you know, the stock assessment for blueline tilefish was completed recently, and it indicated that the stock was overfished and undergoing overfishing.

There are the figures that show clearly the exploitation and the biomass status. There is the list of possible actions. Action 1 would be to redefine the maximum sustainable yield for blueline tilefish. This is something that we started doing with Amendment 24 for red grouper. The MSY for several snapper grouper species that had not been assessed back in 1998, I believe it was, when Amendment 11 that was comprised in the Comprehensive SFA Amendment established MSY for snapper grouper species.

Now that these species are being assessed through the SEDAR process, then the council needs to take action to adopt the new MSY that comes out as a result of each assessment. The way we did it for red grouper is here is your current MSY; and then the proposed would be sort of a very broad wording that would allow the MSY to change every time the stock has a new assessment or every time the MSY changes.

This table shows that currently the Fmsy is the F at 30 percent of SPR; and the value in whole weight is not specified; and it would change according to the latest assessment where Fmsy would be 0.3; and the MSY value would be set at 226,500. The second action is the one that would redefine the MSST, the minimum stock size threshold, for blueline tilefish.

We discussed this a good bit the other day and Luiz explained to you why this was desirable. This textbox here shows you what the MSST value would be were we to use the formula that incorporated natural mortality; and then what the MSST would be if we would use the formula that uses 75 percent of SSBmsy.

There is a good bit of difference; and so if the council were to adopt the second definition or the second way to determine the MSST, then that would change the overfished determination for this species and you would not need to have a rebuilding plan put in place. Action 3 would specify the rebuilding schedule for blueline tilefish.

This is structured similar to how we did it with Amendment 24 for red grouper where you have a rebuilding schedule and a rebuilding strategy; and, of course, there would be alternatives specified. We would need to get projections for different time periods and different strategies. Of course, since this is just scoping, we don't have any of that information, but this would be a placeholder.

These projections, these ABC values that you see on this table are the ones that resulted from the stock assessment; from the base run of the stock assessment. This has the ABC and landings only for the years 2013, 2014, 2015 and 2016 at an F rate of 0.3. This scoping document was put together before we received the projections that we talked about the other day from the science center with the P-star value that the SSC recommends for this stock.

Okay, the next action would adjust the ACL, the OY and the annual catch target which only pertains to the recreational sector. Of course, that would depend on what is chosen for the ABC. Because blueline tilefish is currently included in the deepwater complex, then we would need to – once it is removed, once it has its own ACL, then we would need to specify the new ACL for the deepwater complex without blueline tilefish being included. Then we would have to specify the ACT for that complex and the OY as well.

There is an action to put in management measures for blueline tilefish; and this is where we wanted the public to provide feedback to the council on things they thought could be done. For commercial we just had examples of things that the council could consider, such as a change in the fishing year. The current year is the calendar year. There was a suggestion that maybe changing it to start April 1st would be beneficial.

Setting up commercial trip limits was another idea. Then also because this fishery is distributed mainly north of Cape Hatteras, North Carolina, and south of Cape Canaveral, Florida, then there was an idea thrown out there that perhaps the council would consider establishing management areas. Of course, that would necessitate setting up different ACLs for each of those different area.

Then for the recreational it is pretty similar; again changing the fishing year, maybe modify the bag limit and then maybe consider a recreational season like the council has done recently for black sea bass. Here is just a table of the landings; and you can see clearly that in 2011 the landings dropped and that was because of the 240-foot closure that went into place for that time period. Here are the landings; just a table.

Like I said, we held a webinar. We had actually just a couple of folks that attended; and then we received just two written comments. That is what I want to turn your attention to next. It is Attachment 9A. What I did was just basically pull out the main points that folks were making; and then the comments themselves are attached, also.

Basically there was a suggestion to consider a start date of May 1st; consider 2,000 pounds for a commercial trip limit. There was also a good bit of concern about there being no regulations on the harvest of this species in Virginia and to the north. Some folks were thinking, well, maybe they could harvest blueline tilefish in the South Atlantic and then maybe land them in Maryland for whatever, that could be problem.

Also, there was also concern about the limited amount of data that went into the stock assessment and the uncertainty that it created. Generally, the management area's idea did not go too well. I guess folks didn't think that would work well for this species. Then one individual commented that consideration of MPAs would be a benefit to this particular stock.

The Snapper Grouper AP actually had a comment. This is something that I just recall and remembered that it was brought up during the meeting. There was some concern over some of the commercial landings not representing blueline tilefish, but actually perhaps representing golden tilefish. I think that was from like a time ago. That is in a nutshell what we're looking at, and I'll let Jessica tell you what we're thinking.

MS. McCAWLEY: First are there any questions? Ben.

MR. HARTIG: I was interested of when you're removing blueline from the complex; is there a possibility that we could look at that complex and remove another species from it as well and switch; or, do we need to be just specific to blueline since we're dealing with just this amendment?

MS. BROUWER: You can obviously do that; but, yes, depending on whether the change for the ACL and the ABC is done through a plan amendment, then you could do that. If it ends up being done through a regulatory amendment, I think that sort of change may not be allowed. Monica is raising her hand so she could probably answer that question.

MS. SMIT-BRUNELLO: Well, yes, this gets to another thing I was just looking at, which is I had thought we could do many of these things in a regulatory amendment, a framework amendment. I think that if you're talking about pulling blueline out of a complex, which is kind of what you asked, and then maybe doing that with other species. I've looked at the framework, and I don't think that you can change species complex composition via a framework amendment.

I think it has got to be a plan amendment. To answer your question, yes, you could do this for other species in addition to blueline, Ben.

DR. DUVAL: I guess just in terms of the changing of the minimum stock size threshold definition, as was suggested by the SSS, it is my understanding that we could maybe do that through a regulatory amendment and I look to Roy and Monica for some input on that, to change that definition to that 75 percent of SSBmsy.

MS. SMIT-BRUNELLO: Yes; you could do that via regulatory amendment.

DR. DUVAL: So would that be kind of the first step that we would want to take would be to potentially initiate a regulatory amendment to modify that definition?

MS. SMIT-BRUNELLO: Well, the staffs have quite a bit of work to do; and I think that if you would do one document that would make most of the changes that you want to do with blueline tile, I think that would be a good way to go. Certainly, you can split it up and do framework amendments and regulatory amendments and then deal with other things in plan amendments, if that is your question. I thought your question to me was could you deal with some of this in a framework amendment and then perhaps some other things in an FMP amendment. Maybe I'm getting ahead of myself.

MR. WAUGH: I think the interest was to try to get the change in the minimum stock size threshold definition done as soon as possible for blueline and for several other species. We've got alternatives worked up that could do that. The thought was we'd look at that at this meeting, get your guidance on those alternatives and then bring you back a document at your March meeting for you all to approve; just changing the MSST definition and approve for formal review at the March meeting. The idea is we need to get that in the system and if approved, then we don't have to do a rebuilding program for blueline.

MS. SMIT-BRUNELLO: And I think that's a fine approach; that's a good way to go. I think I misunderstood your question a little bit.

DR. CRABTREE: And the problem with the MSST that Dr. Barbieri talked about and the SSC talked about it, when we established MSSTs for blueline tilefish – and I suspect this is true for quite a few species – where we didn't have stock assessments, all we really established was a formula; but we didn't have a value for M, so we didn't really know what that formula meant.

The other thing that has happened over time is we've done more aging work and we've learned these fish to be older than we thought; and so the estimated natural mortality rate has become lower than we thought. Where we find ourselves now is that we have minimum stock size thresholds that are so close to the rebuilding target, which is Bmsy, that we don't have the resolution to tell if we're below it or we're not because they're close together.

What we want to do is change our minimum stock size threshold so that we can make some meaningful distinction between the threshold and the target so that we just don't through natural variation or uncertainty in the assessments bounce back and forth between overfished and not

overfished. I suspect there are probably, what, six or seven species maybe, Gregg, that are in that situation. I think to go ahead and take a look at that through a regulatory action now would make a lot of sense to do.

One last thing I wanted to pointed out is that you will be getting a letter from the Fisheries Service probably next week notifying the council that blueline tilefish is overfished and undergoing overfishing; and that then according to the statute – and there will be a notice in the Federal Register with that status designation.

Then with the statute you have two years after identification of that to implement a fishery management plan that then ends overfishing and rebuilds the stock and all. Now, before the two years ended you can certainly go ahead and take an action to end overfishing and deal with it. As Gregg pointed out if the MSST was changed to 75 percent, then based on what you have you wouldn't be overfished; and at that point the status would not be overfished anymore and a rebuilding plan wouldn't be required. We need to be really clear that our rationale for looking at the MSST is because of what we have learned now and the new information we have indicates that they're just too close together and we need to put more separation between the threshold and the target.

DR. DUVAL: Thanks for that, Roy, and I think that was my intent in asking the question is now that we have this new information based on the stock assessment, in order to make sure we don't keep fluctuating above and below or between a target and a threshold – so I guess I'm wondering if it would be appropriate to have a motion to direct staff to develop such a regulatory amendment. Would that be appropriate at this time?

MS. McCAWLEY: Yes.

DR. DUVAL: Well, then I would move to direct staff to develop a regulatory amendment to modify the definition of MSST for blueline tilefish as well as any other appropriate species with similar low natural mortality and bring to the council for review and approval in March.

MS. McCAWLEY: Doug, are you seconding? Is there discussion of this motion? Doug.

MR. HAYMANS: I just wanted to make sure I understand. This basically removes Action 2 from 31? No, it does not?

MR. WAUGH: What we have to do is you leave the rebuilding program in Amendment 31 now. Once this regulatory amendment – assuming it is going to be approved; once that is approved, then the rebuilding action in 31 would drop out; but we can't remove it now, because right now it is overfished.

MS. SMIT-BRUNELLO: Doug, did you mean Action 2 which is MSST?

MR. HAYMANS: I thought that is what I said; what did I say?

MS. SMIT-BRUNELLO: I think so; so, Gregg, the MSST action could come out of this amendment, right, because that is going to be dealt with in a regulatory amendment?

MR. WAUGH: Yes, I'm sorry, I misspoke. That is correct; the MSST could come out of this.

MR. HAYMANS: So basically 31; will it sit on hold then until we get regulatory amendment whatever through?

MR. WAUGH: It won't sit on hold; but we won't work on that rebuilding program. We will keep our fingers crossed that is going to drop out; but we will have to have a document that will establish the new blueline ACL, pull that out of the Deepwater Complex; and then establish a new ACL for the remaining members of the Deepwater Complex.

As Monica just indicated, that needs to be done through a plan amendment so that will stay in Amendment 31. Also, if you want to look at some management measures for blueline tile, that would be done through Amendment 31.

MR. HAYMANS: Just to continue on that line if I could for a second; so that complex for the commercial side is like 376,000 pounds; and blueline is the lion's share of that, so the rest of that Deepwater Complex, like eight species, is going to have just 50 or 60,000 pounds across all those species. Wow!

MR. WAUGH: That's correct, and we will have some information shortly that we'll be discussing that will show you what those numbers are.

MS. McCAWLEY: Are there more questions; otherwise, we're going to vote on this. Monica.

MS. SMIT-BRUNELLO: Well, why don't you vote; my question actually is to Action 1.

MS. McCAWLEY: **Okay, to read the motion; to direct staff to develop a regulatory amendment to modify the definition of MSST for blueline tilefish as well as any other appropriate snapper grouper species with similar low natural mortality and bring to the council for review and approval in March 2014. That is approval for formal review. Are there any objections to this motion? All right, seeing none; that motion is approved. Roy.**

DR. CRABTREE: I notice in the scoping document that action really only looked at status quo and then 75 percent; but in this document, Gregg, you will have to look at a reasonable range of MSST. It would be more than just looking at 75 percent.

MR. WAUGH: Yes; we do have several. The staffs have worked up some proposed alternatives for you all to look at; and, yes, it does have a couple more alternatives.

MS. McCAWLEY: Monica, back to you since you had something else on this.

MS. SMIT-BRUNELLO: Gregg, in terms of having an action in which the council chooses MSY, I think we've said before that if the MSY comes out of the stock assessment and there is

really very little scientific uncertainty with it in terms of – well, there are really no policy calls for the council to make. It doesn't necessarily have to be an action.

If you want it to be an action, it could be an action. It would action or no action; you know, what came out of the assessment and no action. I think we've said before when there is really no policy calls for the council to make on that, you could just put it in an amendment; and when the council approved that amendment, it would be adopted and put into the FMP.

MR. WAUGH: And what we've done thus far is once we change to where that is the definition, then we do exactly that. If you look on Page 4 here, the current definition is MSY equals the yield produced by Fmsy. F 30 percent is used as a proxy. We've had that for other species; and then we've changed it. It has been an action to change it from that definition to a more generic definition, which is still MSY equals the yield produced by Fmsy or the Fmsy proxy.

Here is the important part: MSY and Fmsy are recommended by the most recent SEDAR/SSC; so once we have that as our definition, then from here forward it won't be an action. But up to now we've made it an action when we've changed the definition from something else to be whatever comes out of the SEDAR and SSC process.

MS. SMIT-BRUNELLO: Okay, thanks; that makes perfect sense.

MS. McCAWLEY: Okay, moving on with this, there was discussion earlier in the week about referring to the SSC the request to review new projections. Do we want to have a discussion on that? Michelle.

DR. DUVAL: This was something that Luiz had brought up in his SSC report. I think the projections that came out of the assessment were sort of a standard set of projections that we always get; and then once the SSC applies their control rule, then they ask for a revised set of projections based on that control rule.

I don't know if anyone has had a chance to look at those new projections. They were included in the briefing book. They are obviously quite a bit different than what was included in the scoping document. I believe the review panel had requested that 2012 actual landings be included in those projections, which they are, and they're on the order of I think 485,000 pounds, something like that. That's total removals, commercial and recreational discards combined.

Just looking ahead, that level of removals was also applied in 2013 and 2014; and 2013 removals are probably going to be fairly close to that. They're shaping up to be that high right now; and so the new projections also apply that in 2014, assuming that no management changes would occur until the 2015 fishing year.

If you look at those projections at the P-star of 0.3, which was what the control rule produced, you end up with an ABC of something like 25,000 pounds or something like that. I think Luiz had indicated that the SSC would like to review those. I would certainly support that and recommend that. I think John could maybe take us through a little explanation of those projections.

MR. CARMICHAEL: Anytime you end up with projections that change by like 90 or 95 percent from what you had before, it kind of makes you take pause and try to figure out just what exactly is going on. In this case what we had was we had the core projections and the recommendation to use the actual landings, as Michelle alluded to, in 2012. The reason for that is because what they had done is what we normally do in assessments is to use the F rate over the last couple of years to get an idea of what will likely be caught.

Now, if we're catching the ACL, then we'd say use the ACL; but if they're not, which they weren't, we say use the exploitation rate. Well, what happened in this case is if you look here at this dip, this was due to the deepwater closure that was in for a while; so there was a big drop in landings, a drop in F. As a result, that impacted what they carried forward into the next year.

Under the original projections that you have, you ended up with this series of red blocks here. This is the projected yield and over here is just the time series of past yields that we've seen; the blue line. The projected yield was around MSY. That didn't raise a lot of concern because we expect to be managing our fisheries around there; so we weren't expecting a big change when we got new projections which just used the actual landings and did a P-star analysis.

Well, what happened is when you take the actual landings for 2012, which aren't down here – they're actually up here – take the actual landings for 2012, much higher, and then you carry those forward for future years, you get a lot more fish coming out of the population over these next couple of years.

In fact you get, say, in the original projections – and this is the MSY and not the P-star, but this gives you a comparison because we didn't have the P-star the first time, but this gives you original projections and now account for the higher landings' projections for a comparison. In the original ones we were only removing 500,000 pounds of fish from 2012 to 2014. Under these projections we're removing 1.4 million pounds.

That is a huge difference in what you're taking out of the stock. Keep in mind that both projections are starting at the same population level at the beginning of 2011. When they go in and figure out what did you do in 2012, what did you do in 2013 and so on, they're all starting at the same population level to begin with.

But you take out more fish over the next few years, then you're going to drive your biomass down and you're going to have a real adverse impact on your fishery, which is why in the latest projections it shows that the interim period, while we develop regulations, takes until 2014; and then in 2015 to achieve MSY we'd be fishing on the order of 20,000 pounds because we've sucked out so many fish.

We've sucked out another one million pounds over just a few years, which is a lot. That is why we're getting such a drastic change in these projections. One of the things that I noticed in looking at these projections is that to get that high yield you have to drive the fishing mortality rate up an awful lot.

I looked at again the blue being the time series; this is the apical F or the peak F that was estimated over time. The red comes in here with the fishing mortality rate that is required to remove that level of fish from the population. One of the things I was considering was, well, what was the F rate during the years when we had high landings before; because we had high landings here and we had high landings here. You know, what was the F rate did that?

Well, those Fs were never above 1; and throughout the history of the stock we never really had Fs above 1; but the F that is necessary in 2012 is about 1, which isn't really surprising and certainly not out of range of what we have observed; but as you go into 2013, it goes up over 2; and then in 2014, it goes up over 5.

Well, F is on a log scale and once you get above 3, you're removing something like 95 percent of what is available. It never approaches a hundred percent in terms of the log. It just asymptotes toward it; but once you get up around 5, you're removing virtually all the fish that are there. What it's saying is because of this high removal going on in a couple of years with average recruitment going into the population, of course, you're fishing down that stock so much that you've got to remove virtually every fish that's there by 2014 to maintain these landings' levels.

Remember, these are not landings' levels that we know that occur; they're the landings' levels that we assume might occur. The question then that this leads to is to say, well, is that realistic; could something else be going on in this population? Is there something else that will allow it to support this level of landings? Is there maybe a good year class that is letting support this level of landings right now? Those are things that we just don't know.

There is a lot of uncertainty and uncertainty in this case leads to a lot of risk. The red flag for me is simply this extremely high fishing mortality; and I think this is one of reasons we want the SSC to look at this to get their take and see if there is some way we can reduce the uncertainty we have here in this situation.

The other thing that is interesting that brings it all together is to show those figures on one graph. The blue, recognize that as the landings' trend; and the yellow is the F over time; and you can see that when we had those peak of landings back in the mid-eighties we had a spike in F a little bit; and then it sort of cruises along here without a lot of variability.

Then with this recent increase in landings and we see the F sort of lagging, we had some good year classes in here; but then as the year classes moderated, we've seen this F going up, which is what is expected. But then this really shows how drastically different the fishing mortality is that is necessary to remove this level of landings from the stock.

There is sort of two things going on out there; either those landings are not realistic and they're not going to be taken. Well, we know that's not true because they took them in 2012 and we're on track to take them in 2013. Then the question is, well, if the fishery is taking that level of landings, maybe there is more fish out there than what we knew back when we did the terminal year of assessment. It's always a possibility; but as I said, there is a huge amount of risk in that.

One thing to look at here is just the landings and sort of show you how we have a pretty good idea that the landings are continuing to be high; so there is not any, well, maybe the landings have been less 2013 and we'll be back around MSY; we can be there in 2014; and we're not fishing our stock down to virtually nothing to where we have no yield in 2015.

This is from the projection document and it shows that there were 484,000 pounds in 2012; so just looking at what we have for 2013, we have the commercial ACL monitoring from the SERO Website of the Deepwater Complex. It shows that as of today, which was Monday, on the order of 268,000 pounds.

We talked about an MSY around 200, we're already over that; and blueline is the biggest thing in this complex, we're already over that on the commercial as of whenever those statistics are through. If we look at the MRIP, which we had available through Wave 4, which is July and August, they were at 200,000 pounds and 70,000 fish for 2013.

Now notice over here the MRIP landings were 90,000 pounds in 2012. That is a lot of landings from MRIP for blueline tilefish. This is one of the things that if there is anything that makes me think there could be a good year class out there for this, it is this because our recreational fisheries tend to have an increase when then there is a lot of fish available.

But again we just don't know that and it is really risky to infer what is going on out there in this population from just looking at landings; because there is always the possibility of other things going on; but one of those other things in my mind is maybe there is a good year class. Certainly, we see that in 2013 we're on track to catch an awful lot of fish again; and that should give us concern and give us reason to think we need to act pretty quickly.

So we looked at all those; and the first thought in most people's mind when see projections like this is to ask us, well, what is wrong, what was done wrong. Well, the bottom line is really not that much. The assessment is not wrong. We have the assessment and it has been through the peer review. These are different projections; they're starting from the same base assessment.

Are the projections wrong? No; as I just showed, they reflect the current landings. The projections are valid based on the information that we have. What we're dealing with really is not anything wrong. We can call it tongue-in-cheek a bit; it is a known unknown. We don't know how many fish were born since 2008, and that's the simple reality of the stock assessment.

The recruitment deviations, which is the years they actually estimate recruitment, is estimated through 2009 in the stock assessment. We had a terminal data year of 2011. We just got it through the SSC, so there is a lot of lag as we work through these, and even more in recruitment. They estimated recruitment at age one, so that is the 2008 cohort, so that is fish that this year are five years old.

Well, the recreational fishery selects for fish at age three. This means the age of fish that are vulnerable and show up in the catches. The longline in the commercial, it is a lot higher, like six-plus. The fishery overall, there are only about 20 to 30 percent selected out to age four or five. Normally that is not a big deal in an assessment.

If you have information on those fish at younger ages, usually from a survey, then you don't have as much of a lag in understanding when you have a good year class. In this fishery every index we have is from the fishery-dependent data; so that means we don't have any indices on ones. We have a little bit on two because we see some recreational catch a two. We have maybe a pretty good index coming in about age three.

That sort of works into how well our assessment was able to estimate recruitment even in, say, 2008 and 2009, which plays into being where we are and looking ahead to 2014 and 2015 as not really having a good handle on what the recruitment was out there. That's why I say there could be a good year class. The bottom line is we simply have no way of knowing if that was true.

DR. CRABTREE: And so I guess the only way to really get at the year class in any definitive way would be to update the assessment and pull in some additional years.

MR. CARMICHAEL: Yes.

DR. CRABTREE: Wouldn't it be possible, assuming we have a otoliths from the recreational fishery, to do some – I'm thinking back to red snapper. We had a very similar situation in red snapper where we thought we had some big year classes; so we did an aging study; and sure enough those cohorts popped up in the aging. Of course, then we did a new assessment.

MR. CARMICHAEL: Yes; I'll get at that in the next slide actually when we go through –

DR. CRABTREE: Oh, I thought you were done; I'm sorry.

MR. CARMICHAEL: I'm almost there.

MR. HAYMANS: Well, I was actually going back to the landings' slide. That shows me slightly less than 200,000 pounds in 2012; and that is supposed to be actual landings.

MR. CARMICHAEL: No, no, the updated one is the green, which shows you over 400,000 pounds. The OFL, the ABC, and the ACL that we're setting at is around 600,000 pounds. From a landings' limit we would say we're doing good, but we know we're not.

MR. HAYMANS: So what is the dip; what year is the dip; is that '11?

MR. CARMICHAEL: 2011 when you had the closure is the drop, yes; and then it goes up here. This is based on the new projections right here, which is reflecting the actual landings in 2012; so we're up there.

DR. PONWITH: So if you go back one slide – sorry, it's the slide that shows where we are in 2013 in terms of the – that's the one. So the one thing that the SSC may wish to consider when they're looking at this issue is to take a really close look at the MRIP numbers. The reason is because this is the year that MRIP has implemented the new dockside intercept sampling protocols.

We're having some experiences in the Gulf where those numbers are different than we expected, and we have to ask the question are they different because things are different or are they different because of the methodology. I think it may be worth consulting the MRIP people far enough in advance of the SSC meeting and let them know what we're looking at and ask them to do some sort of data diving to see if they can reflect on if we could expect that there is any influence of that methodology change in the recreational numbers.

MR. CARMICHAEL: Yes, that's a good point. One thing that is interesting – and I don't know what this means, but a lot of fish in the 2013 so far, there was a big increase in the B-1, which is the fish that are reported dead but the samplers didn't see. A lot of times it was considered fish that were used for bait or fish that were thrown back dead as opposed to B-2's that are thrown back alive.

There is something interesting going on there; and maybe it's not going to go to the 200,000 pound level, but, yes, we know it's up there and it's showing an increase from 2011; and it goes up to 2011 was one of the lowest and it goes up in 2012; and it is heading up again in 2013. A couple of things just to sum up what we know about the situation; and the current ABC is about three times Bmsy.

That to me is a major concern; and given what we know about the stock, that's a real concern right now. If the removals continue at the current rate, the biomass will decline and the future yield is at risk. This is regardless of whether there is a good year class or bad year class out there. If you fishing at three times of Fmsy, three times your Fmsy yield, you're going to drive your stock down.

You're going to have spectacular year classes to prevent that from happening. We need to stop the bleeding in this fishery essentially as soon as possible. If there was a good year class since 2008, then the recent landings that are over MSY, they might not be gloom and doom for 2015 and beyond. But if there wasn't a good year class, then those recent landings probably have damaged the stock; and there is going to be some cost for 2015 until whenever recover occurs.

On the one hand we want to really hope that there is a good year class; but on the other hand I think there is a very real need to get the fishing level down at least to the MSY level as quickly as possible. That brings up what we can do. I said besides taking two years to end overfishing – as Roy mentioned, we have two years to end overfishing.

One of the fears is that we kind of know how these fisheries management operations go; and we go out with a cut from 600,000 pounds to 20 or 30, that is going to be tallied as 95 percent draconian action. If there is a good year class, people will be seeing it and we'll be hearing all about it. We will probably have to drag it out for two years to end overfishing, which is unfortunate because the real risk to the stock is continued damage because you're at 600 and you know at the most you can be at is 200.

I think we really need to immediately reduce the ACL, whatever it takes; because something even at 75 percent of the Fmsy level, while we take the time to figure out what has happened in

recruitment since 2008, where does the stock stand? The first step in that is we ask the SSC to review the projections and request an update.

It is not anything anyone wants to hear and certainly not me, but an update to determine if there is a good year class and so we have an ABC that is well informed and reduce it to 2015 and 2016 uncertainty, but at least that is a little time window; and perhaps consider requesting updated projections with the lowered 2014 ACL if the council can take action that quick.

We didn't ask for projections that had a catch change in 2014, because we really had no reason from the preliminary projections to think the council was going to need to act that quickly. It seemed that we were at the MSY level and that's where we would be heading; and with the two-year window, we think regulations would go in for 2015.

But if we can act faster, then one step obviously in the very short term is just to update with a lower catch in 2014. Another thing is – and Roy has already stolen the thunder on this one – request an evaluation of the age composition in 2012 and 2013. If there is a good year class out there, something like this could give us some indication of it; and it may give us a little less risk as we move forward and develop the other actions or if there is some delay getting an update.

At least if we knew a little more information about the year class, we could have some more confidence in any preliminary emergency actions we might take. It seems that is possible. We had age composition from the recreational fishery showing up in 2011, I think, in the assessment. I would hope there is some age data from the recent years. We certainly have age data from the commercial fishery. There has been good sampling of that North Carolina fishery at least. I think these are of the things to consider. The SSC should be at top and we'd expect that; and the best thing we could do is get an update; but if we can't, then these next items are sort of fallbacks to try and work in the system as best we can.

MS. McCAWLEY: Thanks, John. Do we have questions? Michelle.

DR. DUVAL: I really appreciate John going through that explanation. I think when the scoping hearing was conducted and the original projections were out there, the fishermen were obviously not happy at looking at something like a potential ABC or ACL of 200 and some thousand pounds.

I think they came to understand that and were trying really hard to look at maybe some potential management measures that could reduce the economic impact to themselves while trying to do something that might be fair throughout the region. Jack can talk a little bit more about that. When these new projections came through and showed an ACL stream of 20,000 pounds, that is the sort of thing that really causes a huge public relations nightmare and is reminiscent, as Roy already mentioned, of red snapper when there was a good year class that came through; and black sea bass, we were receiving similar kinds of reports.

Like John said, it is not because there is something wrong with the assessment; it is because this is – you know, this is an assessment that was conducted with only fishery-dependent data. I was the council's observer for this assessment. It was incredibly educational and I'm very grateful

that I got to participate in it; and I highly encourage other council members, if you have not been able to participate in a data workshop, to do the same thing.

You will gain a lot of appreciation and respect for the kinds of decisions that have to be made in terms of the data that you use and how you treat the data. I think it was incredibly collaborative. But that said, I think this particular fishery and this assessment is a little bit of a poster child for some of the issues that we were talking about previous, the need for things like cooperative monitoring with the fishermen as a platform to try to obtain some of the fishery-independent data that we so desperately need.

The analysts had to make some decisions regarding some of those fishery-dependent indices. There were some, I guess I could call them, inconsistent signals in the handline index of abundance and the longline index of abundance that resulted in those indices having to be really truncated geographically just to the area between Cape Hatteras and Cape Canaveral. It sort of gets to what I was saying yesterday about I think some of our Level 1 assessments, not all are created equal and not all have the same kind of data that go into them, and the control rule isn't always able to account for that.

I'm happy that the SSC is going to be reviewing that. Some of the other issues I have heard from the fishermen, you know, I think particularly because these fish are landed all up and down the coast – there are landings up to Montauk, New York – and concern from the fishermen with what are we going to do about that and how is that – and these are larger management issues – how is it that states like Virginia and Maryland can decide to implement a 300-pound landings' limit on blueline tilefish when we're the ones who officially have management of this species.

At the Mid-Atlantic level there is probably a little bit of a – I don't really want to know that is happening or touch that sort of thing. Given that they are widely distributed and sort of looking forward, how do we take advantage of that as a potential source of additional data other than landings, in other words, sampling these landings that are going up and down the coast.

That is another thing that has been brought up to me is that, well, this is supposed to be a coast-wide assessment and really the vast chunk of our data is truncated to between Cape Hatteras and Cape Canaveral; so are there ways that we can utilize I think some of these landings as additional data streams?

Certainly, there are things that the model can't account for like fishermen making their catch north of Virginia and then coming back to North Carolina where they could actually land that fish. It kind of gets back to something that Mel mentioned during visioning, which was a little bit of the science accountability.

The councils are held accountable for the things that we're responsible for such as ending overfishing and rebuilding stocks and establishing catch limits, and those decisions are entirely dependent on the science. The questions that I have been asked by the fishermen is what kind of data or what information is the council going to use to determine whether or not the decisions you're making are resulting in stock improvement.

These are some bigger picture issues that I think this particular assessment brings to light. I think the most frustrating thing for everybody, Bonnie in particular, is that the resources to sort of make some of those improvements are shrinking even as those needs are increasing. I'm not advocating for not doing anything.

I absolutely think that we need to, if we can, reduce the ACL for 2014 to below the MSY level. Clearly, that is going to have an impact on those projections and on that F rate; so I think if we can do something like through an emergency rule to reduce the ACL for 2014 to something like the yield at 75 percent of Fmsy to at least get us partway there while the SSC reviews these projections and we can get some updated projections that would reflect keeping landings below that level, I think it would really help in terms of stock rebuilding and recovery. I've hogged the microphone a little bit here, so I just want to stop and let other people ask some questions and make some points.

MS. McCAWLEY: So was that a motion? (Laughter) It sounded like a motion to me.

DR. DUVAL: **Well, Madam Chairman, I would make a motion to request an emergency rule to implement the following ACLs for blueline tilefish and the remainder of the Deepwater Complex.**

I think staff has those that they can project for you, but the first would be blueline tilefish ACL equals the yield at 75 percent of Fmsy, which is equal to 224,100 pounds whole weight. That comes directly from the assessment. Number 2; the Deepwater Complex ACL without blueline tilefish is equal to 79,684 pounds whole weight; and number three, it is the council's intent that these values be implemented as soon as possible in 2014 in order to prevent catches from exceeding these levels. I guess if I can get a second to that motion, then we can have some discussion.

MS. McCAWLEY: Second by Anna. Under discussion.

DR. DUVAL: Well, I guess I would just ask Monica is this possible. This gets a little bit to the lack of flexibility that our council chairman spoke of during his testimony in Congress. We are required to implement regulations within two years to end overfishing, but it is that ending overfishing that really has the greatest negative economic impacts. I just want to know if legally can we do something like this? This would be good for the fish and at least a little bit better for the fishermen.

MS. SMIT-BRUNELLO: Yes; the Magnuson Act allows you to – well, I'll just read from it. Section 305C says if the secretary finds that an emergency or overfishing exists or that interim measures are needed to reduce overfishing, he may promulgate emergency regulations. When I looked at the Fisheries Service policy for emergency criteria or for emergency rules, certainly one of them is ecological, to prevent overfishing as defined in an FMP or is defined by the secretary in absence of an FMP. I believe you've got a pretty good record for an emergency rule; so, yes, I think an emergency rule is the way to go.

DR. CRABTREE: Yes; I agree with Monica on that. I think this is a good approach. John, at this point I'm not comfortable that we know where to set the fishing level to end overfishing. When I see Fs of five, I don't regard that as realistic. I can't believe the F could be that high. I guess then the question becomes so if we do this, then we still have to take an action to set the ACL; so what basis are we going to have.

We talked about an update, but we need to look into the feasibility of that and what the timing could be and what would the implications of that be in terms of what we may have to give up and all. If we take an emergency action here and let's say we get that in place in March or so, then it could be extended once and would run into early 2015; but we would need to have something implemented permanently by that point.

If it is done through a plan amendment, that means we would need to vote up the plan amendment at the September meeting, anyway. I doubt we can have an update done between now and the September meeting. Maybe we can, but we'd need to look at that. Now, my memory was, John, with red snapper we were in a similar bind.

When we did the projections, we went back in because we had evidence of a strong year class and we redid the projections just making some different assumptions about levels of recruitment. I'm wondering if that's not something we could ask the SSC to take a look at. You could at least make some different assumptions about recruitments to result in what you consider to be realistic; F ranges and things, and maybe that would –

MR. CARMICHAEL: Yes; I think we did do that. It seems like along the way of red snapper we did something like that as that played out over a number of years. I think you're exactly right, we need to do this immediately because if there is a good year class – if there isn't, we know we're too high and we've got to stop the bleeding.

Then we have to set the limit at something and the best science we have now says it is going to be on the order of like – I think the 30 percent P-star runs are like 30,000 pounds in 2015. Well, we know we're making some change if we lower the levels for 2014, which will be a positive. It will raise that up; but I think it would still probably be fairly low; and we're left with the question of how realistic are those very high Fs that are necessary to take the 400,000 pounds, say, in this year.

That is the question that the past brings up; so ideally we would get an update in time to make the right catch limit for 2015. I guess it gives us the time of the emergency action can stay in place for us to try and get that done and make the tradeoffs of other things or consult with Bonnie and here folks about the reality of getting that update done.

DR. DUVAL: This is a little bit more of a procedural issue; but I was going to see if Myra could kind of walk us through like what this would mean for the allocations between the sectors for blueline tilefish and the accountability measures. I think there is some information on quota monitoring reports like what applying these catch limits would look like in terms of how long the ACL would last.

MS. BROUWER: I have up on the screen a table that shows the ACLs for each of the species that comprise the Deepwater Complex. In yellow it shows you what the ACL would be if blueline tilefish was taken out of that complex. The Comprehensive ACL Amendment, when it was implemented in 2012, established allocations between the sectors for those species; and for blueline tilefish that would be 50.07 percent commercial and 49.93 percent recreational.

Here it shows you what the ACLs would be for the sectors. For the commercial sector, the ACL would be 112, 207 pounds; for the recreational sector the ACL would be 111,893 pounds. Also, Jack McGovern looked at the quota monitoring reports; and assuming that blueline tilefish is 89 percent of the Deepwater complex, he suggests that the commercial ACL could likely be met in the beginning of June.

If you take blueline tilefish out of the Deepwater Complex, that would result in a new deepwater commercial ACL of 60,371 pounds; and the recreational deepwater complex ACL of 19,313 pounds. I also have up here the current accountability measures for commercial and recreational, the ones that are in place for the complex. There would need to be accountability measures similar to these for blueline tilefish if it does get removed from the complex.

DR. PONWITH: If I heard you right, it was to explore what it would take to get an update early enough to advise on the 2015 ACL. If I could trouble you to back-calculate as to what the timing for the actual science would have to be to meet the regulatory deadlines for that to happen, that would help me to at least be able to reflect on the feasibility of that.

MR. CARMICHAEL: So, Roy, at what council meeting would we need to have the number?

DR. CRABTREE: Well, you're going to need it before the council meeting so we can develop a document to take action on. We'd probably need to take action in September, which means we'd need the number I would guess by the June meeting. It's pretty short.

MR. CARMICHAEL: You said the June meeting; and you'd say the April SSC. That is not very far.

MR. WAUGH: But, John, the SSC could look at all these other questions that we pose to them; and should the update be able to be done after the April SSC meeting but before our June meeting, the SSC could look at that new information via webinar.

MR. CARMICHAEL: Yes, absolutely, a webinar or a conference call or something. We can convene the SSC when we need to make this happen.

DR. PONWITH: I will consult but I can tell you that it's concerning because this is the year we're doing red snapper and we're gearing up for the workshop that the SSC has requested regarding the process for developing those indices. The other thing that we're doing is the gray triggerfish, recalibrating those ages from the spines.

We've had the calibration workshop that was really productive, and the indications are we are going to have to go back and reread some of those spines. If I'm hearing you correctly, one of

the big questions in our mind right now is there indeed a spike year class in there or really robust year class that is contributing to these unusual patterns in landings.

That right there pretty much implies that we're going to have to do a bunch of very, very fast aging to be able to look at an update. I will tell you those are the things that I'm worried about right now; but what I'll do is consult with the age lab and the assessment scientists and consult with them about this and then be back to you in time for full council.

DR. CRABTREE: We ought to think about if we can't get an update done in that timeline, then it seems to me the next best thing is to ask the SSC to work with these projections but with some tweaks to them. If we could some aging along that timeline to get some validation that there may be a year class there, then we would have some justification for modifying the recruitments used in the projections.

We could use that to give us some temporary guidance for the ACL that we put in place. Then after we get the update, we could do a framework and change it. That may be the best we can do to get through this, because it is a tight timeline.

Now, I guess if we had this document reviewed at the June meeting and then we got the ACL – as long as we had it at some point far enough in front of the September meeting to plug the numbers in and do the analysis; then the council could come in and vote on it. It is still an awful tight timeline to get to that.

I really think, John, some focus on what could be done in terms of some aging and then what could we get the SSC to do; and maybe some talks with Luiz about different ways to look at the projections to give some interim guidance that avoids these unrealistic spikes in F and things that seem very unlikely to be reality.

MS. McCAWLEY: Ben, and then I'm going to come back to the motion that's on the table.

MR. HARTIG: Michelle, on the aging probably from Beaufort and others point of view is going to be pretty tough. In black sea bass North Carolina took on an additional role to aging a whole bunch of black sea bass, I remember. Can North Carolina do the aging work for the blueline tilefish?

DR. DUVAL: Well, I'm probably in the same position as Bonnie as having to consult – and I see Chip shaking his head in the background in the negative. We did have a couple of our staff I think participate in the aging workshop that was done for blueline tilefish. I'm pretty sure Stephanie participated in that. She went over and worked with Jennifer on that. We have one person that I know of who has any experience reading blueline tilefish otoliths and that's it. That is a valid request and I will look into it.

MS. McCAWLEY: Is there anymore discussion before we take a vote on this motion? Are we ready to vote on the motion? **Okay, anybody opposed to this motion please raise your hand. That motion stands approved.** Based on the discussion that we were having before we took the

vote; do we need some motions about what to direct the SSC to do? Does staff want that in the form of a motion or do you feel like you have enough direction?

MR. CARMICHAEL: I think we have pretty good direction. We want to have the SSC look at the projections; and I think given this motion passing, we want to ask the science center for a projection with this catch level in 2014, because we don't have the projection of this right now. That gives I guess the first point that you have to consider for 2015.

Then we also will look into the aging issue and see if we can get any insight and if there is anything we can do in terms of just projections to try and get better handle on 2015. I think we all kind of know the answer to the update situation given the red snapper and gag finally going. There is another challenge in the aging arena in that we have the gray triggerfish issue where they're going to have re-age all of the gray triggerfish that is part the SEDAR 41 Benchmark as well; and maybe we're going to have to make another tradeoff there.

I just don't know; it is going to come down, I guess, to your priorities as to what the most important thing is. I think we do have enough guidance to know what we need to ask for in terms of getting this stuff done and getting the feedback we need. I guess. Roy, if you take the emergency action, you have until whenever, early 2015; at that point if we didn't have something in the works and coming through and being approved, it would go back to the 600,000 ACL?

DR. CRABTREE: Yes; and that we can't have happen; so we have to come up with something to bridge the gap. I think we need the SSC to come up with up something to do that.

DR. DUVAL: I guess I have a little bit of a question for Gregg just procedurally. This motion passed for an emergency rule. We passed a motion for a regulatory amendment to address the minimum stock size threshold definition. We still have Amendment 31 kind of on hold out there; and so that will stay kind of in the background.

As Monica indicated, the action dealing with setting MSST could come out pending approval of a regulatory amendment; but we do need a plan amendment in order to remove blueline tilefish from that complex. The action we're taking right now simply sets an ACL for blueline tilefish, assuming it's approved, so it sounds to me like we still need to maintain a plan amendment no matter what in order to remove this species from the complex. I'm looking for staff guidance.

MR. WAUGH: Yes; that is correct, we do, because we can keep this in place, the emergency levels in place for a year. We can get an extension as long as we're actively working on a permanent fix. That permanent fix will be Amendment 31 where we would split out blueline tile and hopefully by then have a more permanent ACL that we would implement. That would also be a place where you would look at any management measures you wanted to put in place. One thing we need to do, backing up to your motion to approve a regulatory amendment, is we've got some alternatives for MSST levels that we want you to look at and give us guidance; so then that can come back at the March meeting for your final approval.

DR. CRABTREE: The only alternative way I can think of to what Gregg laid out, if you wanted to try and avoid a plan amendment and get all of this done through a framework, would it be

possible, Gregg, rather than removing anything from the complex to just establish a second ACL specific to blueline tile and say that if that's hit before the complex ACL is caught, then blueline tile closes? I think you can establish an ACL through a framework, and it would seem to me it would accomplish essentially the same thing. It's something to think about that might allow you to avoid a plan amendment, which would save a little bit of time.

MR. WAUGH: Yes; it may save a little bit of time, but then we would still have that big ACL hanging out there. It seems to me it would almost be cleaner just to continue forward with that Amendment 31.

MS. McCAWLEY: I'm going to ask Gregg for direction; do we need to look back to the MSST that we just talked about earlier?

MR. WAUGH: Yes; what you did was approve a motion to directing us to develop a regulatory amendment and you want to give final approval at the March meeting; so the two staffs have put together some alternatives. We'd like for you to take a look at those and give us your guidance on those, so that then that's the alternatives that would be analyzed for March. Again, we don't have a lot of time to put this analysis together; so we want to make sure you are clear on what actions and what alternatives for which species you want included in this regulatory amendment so that we can do the analysis and have it ready for you for the March meeting.

MS. McCAWLEY: Myra, are you ready to do that?

MS. BROUWER: Up on the screen we've got the potential action and alternatives to do this. The action reads, "Redefine Minimum Stock Size Threshold for Select Species in the Snapper Grouper Fishery Management Unit." Alternative 1, which is the no action, would retain the current definition for species in the management unit.

For golden tilefish, red grouper and snowy grouper, MSST equals 75 percent of SSBmsy. For the remaining species in the FMU, MSST equals SSBmsy times one minus M or 0.5, whichever is greater. That is what is currently in the books. Obviously, you've done this change to MSST individually for some species; so we would be taking care of the rest.

Alternative 2 and its subalternatives would allow you to make that change; and then the subalternatives have different levels of natural mortality with 2a being 0.5, 2b is 0.2 and 2c is 0.25 or lower. This table right here shows you what we know about natural mortality for this group of species. This is how we would structure the action to analyze and bring back to you at the council meeting in March if you approve this language.

MS. McCAWLEY: Are there comments on that? Roy.

DR. CRABTREE: The only thing that gives me a little pause is I have a feeling when the NEPA people look at this, they'll question having 75 percent be the only alternative level. I think it might be more complete if you had an alternative of, say, 50 percent in addition to 75 percent. If you look around the country, I suspect more MSSTs are based on 50 percent than any other

value. That is what they use in New England and the Mid-Atlantic. There are a lot of reasons why we may not want to go there.

MR. CARMICHAEL: Yes; I noticed the Mid-Atlantic uses 50 percent for everything. Well, the 50 percent would still be in there for anything that has an M that is above 0.5. Right now we're at one minus M unless you end up being more than 0.5, so we have a limit at 0.5. This has a limit at 0.75; so any stock where your M is lower than 0.25, you'd max out at 0.75.

We'd really end up with our MSST being a range between 0.5 and 0.75 depending on M. If you have a really low M, the lowest you can be is 0.75; and if you have a really high M, the highest you can be is 0.5. Yes, so the NEPA thing, I think there are a lot more alternatives than what it just sort of looks at because we're just changing one side of that equation that we have in place now. I kind of like the 0.5 for a lot of things, too, but it is not something we have talked about at the SSC or anything. The 0.75, we do have SSC support right now for it.

DR. CRABTREE: Well, I just raise it up because it may come up. If the NEPA folks and Monica are okay with this range; then, okay; but I think we as a council need to give staff the latitude that if they need to put another alternative in there, that they go ahead and do it. If we're all in agreement with that, because we're going to vote this up at the next meeting, so we want to make sure it's okay.

MR. WAUGH: That's a valid point and I think we'll do our best to convince the NEPA folks that in this instance 0.5 would not be reasonable. It doesn't have, as John pointed out, any scientific review by our SSC for these species, and we're on a very tight timeframe here. Adding another alternative that is not going to be chosen may not be reasonable; and we will do our best to convince the NEPA folks. I think Roy has a good suggestion that if they're not going to budge, then we need the authority to add an alternative at 50 percent.

MS. McCAWLEY: Do you need that in the form of a motion?

MR. WAUGH: Yes; we need a motion accepting these and giving staff the ability to add another alternative.

DR. DUVAL: I move that we accept the alternatives as proposed by staff and give them latitude to include additional alternatives as needed.

MS. McCAWLEY: **Okay, I'm going to read that motion for everybody. The motion is to accept the alternatives as proposed by staff and give them latitude to add alternatives as needed. Roy seconded. Is there any discussion on that motion? Any objection to that motion? Seeing none; the motion passes.**

DR. DUVAL: Not to belabor this discussion – I know we're already almost 15 minutes into our public listening session – but I did just want to talk a little about potential future management measures. I had talked to several fishermen and Jack had talked to several fishermen; and I was wondering if I could put Jack on the spot to just describe some of the measures that they had

discussed that hopefully would have worked throughout the range of the fishery for future thought in Amendment 31.

MR. COX: Well, in regard to this amendment, a lot of these blueline tilefish are caught in North Carolina. Anyway, I represent quite a few boats out of the Morehead City area. We're not too far from Hatteras and the Wanchese area, but the fishing up there is a whole lot different. That is where the guys longline for the fish, so I've been talking with those guys and conversing back and forth on what we might be able to do with this fishery.

It starts in January and our guys start snowy fishing in January, and they go out and they'll catch their limit of snowies; and during that time they will interact with the tilefish. About every other trip they'll come in with 50 or 60 pounds of gray tilefish. What some of the guys in Wanchese and I thought would be a very good idea would be to do a trip limit and start that trip limit in January through April with maybe like a hundred pounds; and then starting in May to increase that trip limit to somewhere around 2,000 pounds.

That would allow the longline guys up there to make it a profitable trip at 2,000. They have been catching somewhere in the range of about three, but they said they could still make it around 2,000 pounds. Then when we get to about 80 percent of that ACL, to back it back to a hundred pounds for the remainder of the year. I guess I could put that in some kind of motion or discussion.

MS. McCAWLEY: Do we need a motion to look at that in Amendment 31?

MR. WAUGH: That would probably be the cleanest to do it. I don't know if Myra got that down and can type it up. What was the trigger level; was it 75 percent of the ACL?

MR. COX: We were thinking about 80 percent.

MR. WAUGH: Eighty percent?

MR. COX: Yes.

MR. WAUGH: And then it would drop to what?

MR. COX: Back to a hundred pounds. That was also taken in regard for other folks in North Carolina – I had spoke to Kenny and some of the guys down below us as well, and they thought that a hundred pound trip limit would work.

MR. HARTIG: That would work for our guys; that would work for us. We're going to have small catch levels and somehow we'll be able to not throw those back dead. I can't remember when snowy closed this year, because that will be the end of our blueline tilefish fishery whenever that closes.

MR. COX: Yes; that's just about when we do the interacting with them, too. It seems like the snowies it's early summer. Okay, what I had proposed was a January through April hundred pound trip limit.

MS. McCAWLEY: Does that look exactly like you have described, Jack? I had down that you wanted a hundred pound trip limit from January to April and then in May it was up to 2,000 pounds; and then when 80 percent of the ACL was met, to go back to 100 pounds. That is what I had.

MR. COX: That is correct.

MS. McCAWLEY: Okay, we'll work on the motion up here so just give us a minute. Let me read the motion. **The motion is to add a management measure alternative to Amendment 31 that would set a commercial trip limit for blueline tilefish of 100 pounds from January to April and 2,000 pounds from May onwards. When 80 percent of the ACL is caught, the trip limit would be reduced to 100 pounds.** Seconded by Ben. Under discussion. Charlie.

MR. PHILLIPS: Jack, I know there are going to be some new ACLs, but I'm taking it – I guess you all thought about when if you dropped to 80 percent, you'll still have time to catch the rest of that other 20 percent with a hundred pound trip limit?

MR. COX: Well, what it would allow you to do if there is some interaction with those deepwater fish outside of 50 fathoms, you'd still have a little bit of your bycatch is the thinking on that. Most of that is going to occur during the snowy season.

DR. CRABTREE: Well, just to understand if this passes, staff is going to have to construct a reasonable range of trip limit alternatives. I don't know if you need that in part of the motion or not.

MR. HARTIG: Well, Charlie, take into consideration that the blueline tilefish fishery is going to end in our area at least when the snowy is caught; so it wouldn't matter how much was left on the quota, we're not going to catch them.

DR. DUVAL: And that is kind of understanding everywhere south of Hatteras is – really it's only north of Hatteras that fishery is completely different. It is fishing on muddy bottom so anywhere south of there, those two species are occurring in the same area. I guess in regards to Roy's point, I might say maybe direction to staff to explore 1,500 pounds, 2,000 pounds, 2,500 pounds, just to give a range of I think trip limit alternatives, something like that. I don't know if that's sufficient giving direction to staff to explore that.

MS. McCAWLEY: Okay, I'm getting the nod that, yes, that direction is good enough and we don't need to add it to the motion. We have a motion on the table; we're still under discussion. Is there anymore discussion on that motion or the direction to staff on the range of alternatives that will be added? **Okay, is anyone opposed to that motion? Seeing none; that motion stands approved.** Gregg.

MR. WAUGH: Coming back to the motion you passed on MSST, you gave us latitude to add alternatives as needed. I just want to clarify that we would be talking about adding one alternative if the NEPA folks felt we needed another one; and that would be at 50 percent of Bmsy. I just wanted to make sure that was your intent because I think the alternatives as needed is a little too broad. We don't want to consider a bunch of alternatives; just that one additional one if we can't convince the NEPA folks that what we have is enough.

MS. McCAWLEY: That was what I heard. Do you need that in the form of a motion?

MR. WAUGH: No.

MS. McCAWLEY: I think we're done with blueline, Madam Chairman, and I will turn it back to you to close out this committee for the day.

DR. DUVAL: Thank you very much, Madam Vice-Chairman. I appreciate your assistance. We will recess, but I want to turn things back over to our council chairman in terms of when we should reconvene tomorrow morning. I know mackerel is supposed to start at 8:30. We still have several items of business under snapper grouper to finish up.

I didn't know if maybe you wanted consider reconvening at 8:00 tomorrow morning and trying to get through those other items. We have Amendment 29, which is the ORCS. We have Amendment 22 Options Paper, which is the tag program. We have allocations and I'm hoping that will be a somewhat short discussion – I will never try to predict that but a somewhat short discussion based on some of the conversation we had visioning regarding allocations. Mr. Chairman, I turn it back over to you.

MR. HARTIG: We hope we can get mackerel done in an expedient fashion. But, 8:00 o'clock, I think trying to get to your items that we need to discuss and take action on and then mackerel, I think we'll be okay.

(Whereupon, the meeting was recessed at 5:55 o'clock p.m., December 4, 2013.)

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened in the Cape Fear Ballroom of the Hilton Wilmington Riverside Hotel, Wilmington, North Carolina, Thursday morning, December 5, 2013, and was called to order at 8:00 o'clock a.m. by Chairman Michelle Duval.

DR. DUVAL: We're going to go ahead and get started. I would like to go back to our agenda. We're going to go ahead and get started with Snapper Grouper Amendment 22. This is Attachment 7. There is an updated options paper in your briefing book. This is tags to track recreational harvest. Myra is going to take us through that.

MS. McCAWLEY: What is the date of that version; is it 11/21?

DR. DUVAL: Yes, Attachment 7, and it is the 11/21 version. The AP did have the opportunity to review this at their November meeting and did have quite a bit of input on it.

MS. BROUWER: This is Amendment 22. This is the one that would establish a recreational tag program to track harvest of snapper grouper species with low recreational ACLs. In the document, which is still an options paper, I have put the motions from the September meeting. During that meeting, you gave us guidance to convene the IPT and state representatives and council staff to discuss details of the program mainly just to see what resources the states could make available to either establish or run or help run such a program.

This document contains some of the information from that conference call. Currently there are only four actions in Amendment 22. The proposed timeline as it is currently in the books is for you to approve this for public hearings in January. However, because of delays in analyzing and mainly we have not been able to proceed because we still need to have some issues clarified. One of those issues is whether this recreational tag program would be considered a catch share. I'm going to pause and let Monica address that.

MS. SMIT-BRUNELLO: Because of the shutdown and all the things that needed to be done once we got back to work, I requested some assistance from another office to help me look into this issue. We haven't finalized it yet. There was a draft idea that went out, and it got a lively response from the GC attorneys across the country as to whether this would be or would not be allowed. That is still under construction and review. I apologize for the timing; so I really can't give you a definitive answer at this meeting on that, but I certainly expect to give you one by the next meeting.

DR. DUVAL: Are there any questions about that before Myra proceeds with the rest of the document?

MS. BROUWER: Okay, basically I guess what I'll do is just bring you up to date with the discussions that the IPT has had, recommendations that we've received from the SSC and the advisory panel. Both of those entities had a chance to review this document during their respective meetings in the fall.

We continue to have quite a lengthy list of considerations and things that the council needs to decide on before we can proceed. Those are listed under Roman Numeral II. One of the main things that resulted from our conference call with the state representatives was if the states were to administer the program, then there would need to be an allocation of the recreational tags among the states. We are talking about, as you know, a very limited number of tags.

That would obviously be a bit of an issue. The states did state that if they were to implement a program, North Carolina and Florida notably have a lot of resources and experience administering tag programs; and they would have more flexibility in requiring things like data collection, which is one of the things that you discussed in September and decided to take out of the amendment was the catch card portion of it.

Issues also came up about difference states having different requirements for licensing. Some states do not require a license for certain segments of the demographic – you know, folks older than 65 or children, so that would also need to be addressed if having a license was a requirement to participate and obtain a tag. I'm not going to read through all of these. I'm just

sort of going over the main things that came out of that conference call with the states. Obviously, the state representatives have additional comments at this point.

MR. HAYMANS: If you're not going to read through it, then I have one that jumps out. This is number two, the next to the last bullet, on Page 5. The question is specifically for Monica. Okay, we had a considerable discussion on our state conference call about whether the council office could actually administer program; and I understand there had been some feedback from you that would not be possible; and if you could just tell us a little bit about that, please.

MS. SMIT-BRUNELLO: I've not given any feedback on that yet. That's something that we're still looking at. That a little bit plays into whether this is a limited access privilege program or it is not in terms of cost recovery and all those kinds of things. I agree this is a different issue, but to me it's all kind of tied up; so, no, I haven't given any feedback on that yet.

MS. McCAWLEY: To one of the points that Myra just brought up about the different licensing and the costs; something that I had brought up that we encountered with the Gulf Council was when they were talking about a tagging program over there; the fact that the license cost is different per state, there was discussion as to whether or not that violated I believe it was National Standard 4. I wanted to hear a little bit more about that, too, or maybe Monica can look into that as well.

DR. DUVAL: Monica, I'm not sure if you caught that, but as Jessica indicated differing license costs among the states, having a requirement to have a state license in order to participate in the tag program; does that violate National Standard 4 or could you look into that?

MS. SMIT-BRUNELLO: That is one of the things that I'm looking at as well; absolutely.

MR. CUPKA: I'm not sure why we're worrying about requiring them to get a state license. It seems to me that really complicates the whole issue. What we ought to do is just issue a tag; and depending on where they intend to use it, leave it up to them to meet the requirements that are needed to use that particular tag, wherever they're fishing. But when you start doing all this ahead of time, it is surely going to complicate the issue and raise all kinds of concerns.

DR. DUVAL: Excellent point. Mel.

MR. BELL: And sort of to that, some of that discussion was looking at it from a state perspective when we talked to our state people that administer tag programs for game stuff; part of what you do is the individual eligible to apply or eligible for it. That has to do with does he or she have the prior hunting license of whatever.

That's why if you took this to a different level and it wasn't at the state level and there was either a contractor or a federal entity or something that could run it for the whole system, then you just wouldn't have to worry about that. But from an individual state perspective, each state has its own particular requirements for existing tag-type programs.

That's where some of that came up. The other thing to keep in mind with the states is that in our case if we were to do something and charge people a fee for it, or whatever, we'd have to go to the legislature, and this would all have to be codified in South Carolina law for us to be able to do it. That's probably true of the other states as well; so that kind of kicks the timeline a little further down, we'd have to go through the General Assembly and work that whole thing.

DR. DUVAL: Yes, that was definitely a concern, and I think that's consistent across all the states where the legislatures have reserved for themselves the ability to determine fees.

MS. BROUWER: One of the other potential solutions that was also brought up was maybe an outside entity could administer a program. I believe, Doug, you guys were getting ready to implement something for your alligator tags.

MR. HAYMANS: Well, for all of our programs. Our license system is still out for bid. The only bidder is a company called Active Sports. They do licensing systems for about 18 other states. I'll tell you at the moment they are not putting in that fulfillment as part of their primary bid or at least that's what they've told us. We currently fulfill our own tags. For those types of lottery systems, we were turning everything over to a single entity; and at the moment they are not bidding on that part of it.

MR. BELL: Something else to keep in mind, too – and I'm not trying to dodge this from the state perspective. It is just that it adds levels of complication here that you don't find in a centrally run program. Let's say we're talking about a fishery where there are a few hundred fish available and we divide that somehow based on some formula amongst the states, we could find ourselves – let's say where Georgia or South Carolina might have ten or in the tens; and so do we really want to go to the trouble of everything we have to go through to establish a program just to pass out ten or twenty of fifty tags. It becomes not very cost-effective at that point from the state perspective.

DR. DUVAL: All good comments.

MS. BROUWER: So those are mainly the background of the kinds of discussions and conversations that we've been having since the September meeting. We still have in the document examples of species with low recreational ACLs. As you heard yesterday from Robert, the AP recommended that the council specify what constitutes a "low recreational ACL".

Certainly, those species that we have listed here are some that – at least for snowy grouper and golden tilefish where the ACLs are quite low and overages have been occurring over the last couple of years. Then we've got wreckfish which has a low ACL, but harvest is only allowed two months out of the year.

The SSC did go over the document during their meeting in October. They were a little bit disappointed that the data-gathering portion of the program was removed. They still felt that it was possible to utilize and get some valuable information from the program even if it did not include a catch card component.

They had other recommendations such as replacing cost recovery with an administrative fee to distinguish between the nature of the program and the intent of the charge. They stated that eligibility restrictions may be unnecessary if the tags are not transferable since folks are less likely to apply for tags they can't use or trade or give away.

The Snapper Grouper AP also offered some general comments; and the ones that have a question mark by them are things that they discussed and they didn't really come to agreement, but there were issues that came up during the conversation and obviously need to be considered. They felt the tags should not be transferable.

They discussed whether a percentage of the tags should go to the for-hire sector, and that was something that some AP members felt very strongly about and some not so much. They discussed maybe issuing a larger number of tags than the ACL and requiring that the unused tags be returned at the end of each season.

They also mentioned considering a non-profit or an outside entity or contractor to administrator the program. Because there are so many issues that are still unresolved, they did not really have any opinion as to whether the states or the agency should manage the program. They also discussed at length the possibility of a snapper grouper recreational stamp, which is something that the AP has been recommending for some time. They made a motion to the effect that the council should consider establishing a stamp program. At this point I guess I'm going to pause and see if maybe Jim has some additional comments from the AP.

MR. ATACK: On the number of tags issued, I guess the idea we kicked around was if you give out – just an example, like snowy grouper you have 500 fish; and if you give everybody a tag that wants one, then you would just track the landings because they've got to report them when they land them. Then when the amount of fish is caught, you close the season as one way to kind of handle that. Then you wouldn't have 395 percent of the ACL.

You'd be fishing like you are now but you would get the data much quicker and you could stop the overfishing by shutting the fishery down. It was kind of how one way to look at issuing more tags than what the ACL would be. Then there is no lottery and you could see how that worked for a couple of years is one way to kind of look at that.

A lot of the discussion was about like a stamp system in the snapper grouper complex. With that, then you would know the people that participate, and then that might be a requirement for a tag for one of these other fishes that are in the snapper grouper complex. There was a lot of support for that; and that would be kind of data and you know who to survey and you would know your universe of participants out of the licenses that are issued. Like in North Carolina, there are a lot of saltwater fishing licenses issued, but you really don't know what percent go out and participate in the snapper grouper fishery. You can mine your data better.

DR. DUVAL: It is definitely something that the AP has discussed in the past is a stamp. This is probably maybe the third time they've made this motion really with the intent of trying to narrow the universe of participants in the fishery and assist in data collection for MRIP. Clearly, if

something like that were to move forward, there would need to be some conversation with the MRIP Program in order to determine the impact of that on their sampling strategy. Doug.

MR. HAYMANS: I was just going to say the central question to this moving forward is who is going to run it; and the states have pretty much said – at least I've pretty much said that Georgia is not going to be interested in running it, at least our portion. I think until we can get some definitive answers back from counsel as whether NMFS, council or an entity can run it, I think in the interest of time we should move on.

DR. DUVAL: I would agree. I think there is still a lot of outstanding questions as to whether or not this is a catch share program and I think some of the questions regarding who can run it. One thing I'm just going to ask Myra to do is to just kind of quickly run through what the existing actions are in the decision document just so everybody understands what is in there right now.

The AP had asked that we consider reinserting the action that we had previously removed that would define what a low ACL species is. I think Jim had suggested you might use a percentage of the MSST to define what a low ACL is. Of course, that can change as your MSST changes; and for some species that is going to be pretty huge depending on your MSST. Let's just let Myra run through the remaining actions and then we'll move on.

MS. BROUWER: Action 1 is to establish the program as a type of framework that can be applied to any South Atlantic snapper grouper species with a low recreational ACL. Here we just have the two alternatives; no action or go ahead and establish the program. The AP made a motion to go ahead and support establishment of the program.

Then, again as Michelle just mentioned, there needs to be some way to determine what a low recreational ACL is. I'll remind you that we did have an action in the amendment as of the September meeting; and among the alternatives to determine that low ACL were perhaps use a percentage of the proportional standard error from MRIP to determine whether that particular species should be included in the program.

Action 2 is the one that would establish the eligibility criteria for the participants. We have four alternatives. The AP recommended Alternative 2, which is that in order to receive a tag, in order to participate in the program, the applicant must be a U.S. citizen or permanent resident alien, own a valid recreational fishing license from the state from the state in which they will be fishing if granted a harvest tag; or, have a valid renewable charter or headboat for a snapper grouper permit.

Alternative 3 is pretty much the same thing, but it doesn't have the citizenship requirement. Then Alternative 4 simply requires citizenship and none of the licensing requirements. Action 3 would establish the issuance process. Alternative 2; tags would be issued by an electronic web-based lottery program. Alternative 3 includes a mail-in or a call-in system as well.

The AP recommended adding an alternative to establish a tag-issuance program that would base a percentage of the tags issued on for-hire historical participation and consider a control date. This is an issue that I think the AP felt strongly about – or I should say an issue that concerned

the AP a great deal; the issue of whether there should be an allocation of the tags for the for-hire sector.

They approved another motion that says that the AP recognizes the difficulty of achieving allocation and distribution and would suggest that the council allocate to the extent possible to historical participants and resort to lottery distribution when absolutely necessary. They did recommend Alternative 3 as the preferred for this action.

Lastly, we have Action 4, which is the cost-recovery plan; and it just deals with how the fees would be collected or assessed, I should say. The AP recommended Alternative 2 as the preferred. That pretty much wraps it up; and as I mentioned earlier, the timing for this amendment is going to have to change; and so staff would request that you give us guidance on whether we should perhaps look at maybe the August timeframe for public hearings if by then we have the information that we need to proceed with the analyses.

Another thing that had been requested at the September meeting was a presentation from the Regional Office on how a lottery system would work. Because of the delay from the shutdown, the staff from the Regional Office were not able to prepare that presentation, but they said that in March they'll be ready to present that to the committee.

DR. DUVAL: It seems like until we get some of these answers, there is no sense in moving forward; and presumably if we have some of the additional information and Monica is able to get some answers back, then we may be able to send this forward the committee so chooses to public hearings in August. Zack.

MR. BOWEN: The three species that were mentioned, tilefish, snowy grouper and wreckfish, two species the ACL is determined by number of fish; whereas, wreckfish is whole weight in pounds. I was trying to give this some thought before we met to figure out what the definition of low could or would be. Just to give the council members some thought; do we need to go number of fish or pounds? I think we as the council can determine the definition of low before the rest of it moves forward.

DR. DUVAL: Certainly, you can take pounds of fish and convert them using standard conversion factors into numbers; so I don't see a problem with doing that for wreckfish and converting that into numbers. I don't know how other committee members feel, but I'm not sure we're ready to debate today how to define a low ACL. I think it would probably be best to get some of the additional information before we move down that road; but I agree that is something that we should be thinking about and give direction to staff before we send this out for public comment. Mel.

MR. BELL: I was just going to say it is a logical tool to use for harvest control. It is used in other game management systems and all. The trick is establishing a system that will work; and I think central management would be the best option there. Another thing that we kicked around just a little bit, perhaps the thing could even start out as a pilot program where you just picked a couple of the species that we're using numbers for or something and that the fishermen would be more comfortable with.

I understand their sensitivity to red snapper; but we talked about that, too. From my perspective if you're talking about 10 or 15,000 red snapper across the entire South Atlantic, I think that is kind of low, but that is just an opinion on that. Perhaps we could approach it from a pilot program standpoint and try it; but again we've got to work through a lot of details to even get to that point.

MR. PHILLIPS: I was sitting here and I was listening to Mel talk, well, if you split it up by states and you only got ten or twenty or fifty tags per state; and if it is not really cost-effective for the states, why is it necessarily cost-effective for the region? What are we going to get for a bang for our buck? If we're not going to get data – the problem is our accountability measures – wouldn't we be better off to change our accountability measures to try to keep these fish where they need to be instead of going to the expense and all the hoops everybody is going to have to jump through to get tags for this fish or that fish.

Wouldn't it might be simpler to just change our accountability measures and then maybe look at a stamp so we could know who is catching what. It seems like we're doing an awful lot of contortions and it is going to a lot time, money and effort to fix a problem that we might can fix another way.

MR. HARTIG: Charlie, right now we can't count those rare species. The way the landings go, you're up here one year and you're down here the next year; and there is no way to really ever know where you are in rare species right now. I don't know that we'll ever have a much better accountability for rare species. To me this program makes a whole lot of sense to be able to keep our recreational fishermen within their allocation and not get into an overfishing situation.

MR. BOWEN: If we're talking about controlling harvest by a tag, it seems to me that it would be a lot more cost-effective to continue controlling harvest as we're doing it now; i.e. red snapper. We put a three-day season on it; we controlled the harvest of that without implementing tags or the cost of this program.

DR. DUVAL: I'm not sure that is going to work for 523 fish. Doug.

MR. HAYMANS: Red snapper was the reason we started talking about a tag program in order to avoid the three-day season so that you could fish whenever you wanted to. Since we're taking red snapper out of play with a non-low ACL, that is more reason and let's to move on.

DR. CRABTREE: Bear in mind there is a substantial cost associated with the way we're doing red snapper now; because we're putting a ton of people out there for those three-day weekends to try and estimate the catch. The problem is because the catch isn't directly controlled; we could go way over in one of these three-day seasons; and then when you plug that into the formula we use, you end up not being able to have any season at all the next year.

I think the notion of a pilot study is a good one; and there probably are other species like snowy grouper that might be a better one to start this with. At the rate we're on, we're not going to get any kind of pilot study in place until 2015 at the earliest and probably not even then. We'll have the new red snapper assessment before us I would think before we get to a point of really moving

too far down this path; and then we'll have a better understanding of what the future looks like for red snapper and can deal with it then.

DR. DUVAL: My suggestion to the committee is that we provide guidance to staff that this comes back before the committee once some of these outstanding questions have been answered, some of the legal questions. Now, do you still want a presentation from the Regional Office in March regarding how a lottery tag system would work? I'm seeing some heads shake around the table; so that sounds like no, Doug?

MR. HAYMANS: Yes, I would question what are they going to present to us? There are many questions for them to fill in; and by that – I don't know what they would present.

DR. DUVAL: I'm sure they would not be disappointed to not have to put a presentation together; but I see Jack coming up towards the table.

DR. McGOVERN: I think we'd have to know if it's a catch share program or not before we can really do a presentation.

DR. DUVAL: Good point. Bob.

MR. MAHOOD: Yes; I would ask for a little mercy; and if there is something that we don't have to have and we don't know what we're going to do, let's put it off for a while. I think when we get to Executive Finance, you'll see we have plenty of things we do need to do.

DR. DUVAL: Mercy granted. Okay, let's hold off on this until these questions are answered and then we'll figure out where to go from there. I would just say keep in mind we wanted to do this as something very simple, just a way to manage harvest. All right, that's it for Amendment 22; and let's move to Amendment 29, which is the amendment to the ABC Control Rule for ORCS approach and also some management measures for gray triggerfish.

MS. BROUWER: Okay, this amendment is the one that would make adjustments to the ABC Control Rule to address species that have only reliable catch data. We have a little bit of background in the document that explains what this approach is and how it came to be and how the SSC went about establishing their recommendations.

It involves using a catch statistic which was decided as the median – well, the median was actually considered; but instead of using the median, the SSC decided to use the maximum catch over the period 1999 through 2007, which corresponds to the years of data that were used in the Comprehensive ACL Amendment.

Then they went through a lengthy process to establish this scheme to assess the risk of overexploitation for each of the stocks. This is the one that we discussed back in September and you made a motion to go ahead and approve this scalar scheme for determining the risk of overexploitation. Then what the council needs to do is decide on their risk tolerance level.

Based on that decision, then that scalar would be applied to the stock; and that is how you obtain your ABC. As I said, you approved the scalar scheme for the risk of overexploitation; you asked us to remove blueline tilefish from this amendment; you gave us guidance that we put somewhere in the document a review process whereby the Snapper Grouper AP would provide their input to the council; and then this would be done at a certain frequency, every three years.

We also added actions related to gray triggerfish that were previously included in Regulatory Amendment 14; and we added a couple of other actions that we'll get to in just a minute. That is just a recap of what you did in September. We have a couple of edits to the purpose and need, as you see on your screen; just mainly editorial changes. We would need a motion to go ahead and approve this purpose and need.

MR. HAYMANS: Madam Chair, I assume those were IPT recommendations?

DR. DUVAL: Yes, they are.

MR. HAYMANS: **Madam Chair, I would make a motion that we accept the IPT's recommended wording changes for both purpose and need.**

DR. DUVAL: Motion by Doug; seconded by David to approve the purpose and need for Amendment 29. **Is there discussion? Is there any opposition? Seeing none; that motion stands approved.**

MS. BROUWER: What we did for this amendment – it looks a good bit different than what you saw in September so I'm going to try not to confuse you. Action 1 reads, "Amend the South Atlantic ABC Control Rule and specify ABCs based on those modifications." You have a table that is the control rule, and so it explains the steps that the SSC takes to recommend ABCs.

As you know, it's divided into various levels. Alternative 2 is the one that contains the change; and the only change that would occur is what is highlighted in yellow; so it is the Level 4 of the control rule. We would specify that the ORCS approach would be used for stocks in this level. What the IPT is recommending is to split out Action 1 into two actions; one that would amend the ABC Control Rule and then a separate action that would apply those revisions to the control rule to the appropriate stocks.

What you have here, the current subalternatives, what we had in the document in September, I took the tables out from underneath each subalternative to make it more concise; but this is how it was structured. We're recommending structuring it a little bit differently. What we are suggesting is that we divide the subalternatives based on the risk of overexploitation; so each subalternative corresponds to one of the various levels of overexploitation risk.

The first stock, Subalternative 2a, there is only one species in that risk of overexploitation category, and that is bar jack. The tables – this one and the subsequent ones are structured the same way. You have your catch statistic in one column; the risk tolerance that corresponds to this subalternative; what the new ABC would be; what the current ABC is; and then the difference between the two.

For this particular species we have applying a risk tolerance scalar of 0.75; that is Subalternative 2a; 2b would adopt a risk tolerance scalar of 0.9. Then under Alternative 3; this is the next category of overexploitation, species that are under a moderate risk of overexploitation. Similarly we have the subalternatives based on the risk tolerance for each of those; and the tables are structured the same way.

You can see the risk tolerance scalar here under Subalternative 3a is 0.75. Then we go down to 0.8 for Subalternative 3b. Then Alternative 4 takes the stocks that are classified under a moderately high risk of overexploitation and applies the various risk tolerance scalars to those stocks.

MR. JOLLEY: Myra, is there a reason why in some of the tables you've got plus so many on the difference in ABC and others you just don't use the plus; and you're using plus, and I would say that you need to do it the same in all the tables, plus or minus or not.

MS. BROUWER: Yes, that's probably just a typo. Thank you. The Snapper Grouper did review this amendment at their meeting in November. They recommended using 0.9 for stocks that have a low risk of overexploitation; so for your bar jack. They recommended 0.8 for stocks with a moderate risk of overexploitation and 0.7 as the risk tolerance for stocks with a moderately high risk of overexploitation.

They selected the subalternative based on the previous structuring of this action; so this is where things can get a little confusing. They did look at hogfish and there was some concern that it did not really belong in the category that it currently is in based on that structuring of subalternatives, so they recommended using a 0.5 risk tolerance for that species in particular.

Under the summary of effects, we have a table showing stocks that would not be subject to the ORCS approach; and these are species where the SSC had concerns on various issues; the reliability of that catch statistic. There was a lot of variability with black snapper. There were species' ID concerns with other species; so we just wanted to show which ones are not going to be included or the SSC didn't think the ORCS approach was appropriate to apply to these species.

DR. CRABTREE: This might be a question for John or even Luiz; so the ORCS approach is kind of a national thing, right, that was put together. If a stock is overfished, there is a penalty applied in terms of the buffer for being overfished, right?

MR. CARMICHAEL: The ORCS deals with stocks where you really wouldn't know it is overfished because you just have catch.

DR. CRABTREE: Okay, but isn't there in the uncertainty characterization – and maybe I'm not looking far enough through in the levels; so for most of these stocks there would be status unknown?

MR. CARMICHAEL: Yes, status unknown for these stocks. That's how they ended up here. Within the control rule itself, in the other sections of it, yes, we deal with overfished and there

are buffers that account for that. But within ORCS, all of these stocks that we have applied it to, we don't have any status determinations.

DR. CRABTREE: So for the higher level ones – I guess I'm digressing for a moment; but for like Level 1s we do apply a penalty for being overfished; and that is done consistently in the country, do you guys know, or is it different from region to region?

DR. BARBIERI: Roy, I think you were talking about the Tier 1 that we apply for assessed stocks; so because the action would involve a revision of the ABC Control Rule that would add tiers to the rule, the scoping document actually includes all the tiers. This includes the Tier 1 for assessed stocks. They were applied a P-star approach, and this I think what you're talking about. Later on it talks about some of the other tiers, including the ORCS.

DR. CRABTREE: That's good; and I'll talk to you about it during a break.

DR. DUVAL: So really the intent of this document is to just add another level to our control rule in order to apply this ORCS approach. Myra, do you want to continue through the summary of the facts? I know at some point are going to need a motion from the committee to approve the restructuring, but I'm not sure if you prefer to proceed.

MS. BROUWER: What I want to mention – I'm not going to go through the analysis in detail. At this point it is still preliminary. I do want to mention that the analysis is based on the previous structuring of the document; and so the IPT needs to spend more time adjusting it if you were to approve the way that we are recommending that you structure the two actions and alternatives and subalternatives.

It is a little bit confusing; it is going to take us a little bit of time; and we just didn't get to it before this meeting. The analysts put together enough information because this amendment – I don't know if I mentioned this before, but the council should have public hearings in January.

DR. DUVAL: But would you be ready to have public hearings in January if you've got all this restructuring to do and the analysis of that?

MS. BROUWER: Yes; the meat of the analysis is done. We just need to make sure that the text matches the restructuring. I guess what I would need from the committee is to go ahead and approve the restructuring and then we can do our best to try to match the summary of effects to the way that the subalternatives are structured right now.

MS. McCAWLEY: So moved, Madam Chairman.

DR. DUVAL**: There is a motion by Jessica to approve the restructuring as proposed by the IPT;** and seconded by Charlie. Is there any other discussion on that motion? David.

MR. CUPKA: Not specifically, but I want to make sure I understand these tables, Myra. These tables already incorporate the risk of overexploitation? In other words, that scalar has been applied to the catch statistics; and what we're really looking at under these alternatives is the

next thing, which is the risk tolerance which the council is willing to accept. They have already been adjusted for the risk of overexploitation; and we're just looking at the risk tolerance scalar; correct?

MS. BROUWER: That is correct.

MR. WAUGH: I think we have to show a step that is missing here. Myra, for instance, if you could pull up Alternative 2 that is on Page 9 of the decision document, if you look at that catch statistics that is being multiplied by the risk tolerance scalar; I think it is being raised by 25 percent from that in order to get the new ABC.

This is under a low risk of exploitation; and we need to show what is happening to that catch statistic because something is being – that catch statistic is being raised by a certain factor for low-risk species; then the risk tolerance scalar is being applied. It gets confusing when you look at some of the other tables – for instance, Alternative 4a where the values then the difference are negative. We will figure out a way to add that, whether we add a column in here showing that or some way to make that clear so that people understand what is being done.

MR. CUPKA: That gets back to my question about the information in these tables, because I thought what they were doing was taking the highest catch landings and applying the overexploitation scalar to it, which I guess would be 2 and then multiplying that by 0.75 to get the new ABC.

MR. WAUGH: Right; and those values are shown on Page 1. I think what would help is if they're shown in this table as well, because you don't see how the math works.

MR. CUPKA: Right, and that is why I raised the question because you really aren't taking the highest landings and multiplying it by 0.75 to get to the new ABC. You're applying the overexploitation scalar first and then applying the risk tolerance scalar to get the new ABC. You're right, that step is not shown.

MR. CARMICHAEL: David summed it up perfectly. If you look in the report of the second ORCS workshop, it talks about a catch statistics' scalar. The thought early on was that would be an OFL, but there is a note in there that says this really isn't an OFL. It is the value that we referred to before as the value otherwise known as OFL; but it's really not.

The tables that you see there, they do sort of leave you scratching your head; and I think might be where Roy was bringing up the exploitation levels because that actually mentions exploitation, but it specifically mentions the risk of overexploitation and not the actual exploitation status or stock status. I think that's where all the confusion is coming in here on this.

DR. DUVAL: Right; and when we went through the ORCS workshop, we had a lot of discussion about this, that we sort of changed this to risk of overexploitation instead of the exploitation status; and it was sort of that exploitation status that we wanted the input of the AP for that kind of gut-check sort of thing.

I do think it would be helpful, as Gregg said, to modify the table so as to include that extra step. Otherwise, the math looks a little non-intuitive. Does everybody understand the tables now and guidance to staff to modify those tables so that folks can see exactly what the steps are; and then when you 35,000 and multiply it by 0.75 you're not getting 51,000 something.

We do have a motion on the floor to approve the restructuring of Actions 1 and 2 as suggested by the IPT. Is there any other discussion on this motion? Is there opposition to this motion? Seeing none; that motion stands approved.

MS. BROUWER: The next thing you would need to do at this point, if you ready to select preferred alternatives for Actions 1 and 2.

MR. ATACK: When we looked at the tables, we went with the preferred Alternative 4a – I'm sorry, Alternative 2d. Then we made a motion after that to change the risk tolerance for hogfish to 0.5. When you look at the tables, the 0.75 would increase the ABC for the hogfish by 50 percent from where it is now. By going with the 0.5 on the hogfish, the ABC is approximately equal to what it is now. We didn't think that fishery should show a 50 percent increase in the ABC. That was the reasoning we made a separate motion for that.

DR. DUVAL: I'm sure that's partially one of the reasons that feeds into why the tables and the alternatives are restructured to split out those different risk tolerance alternatives for each of the different overexploitation levels so that the committee would not be necessarily bound by a suite of risk tolerance values, but that you could choose the risk tolerance values separately for each level of overexploitation. In order to choose some preferred alternatives, I would suggest that we go back and probably look at the restructured alternatives to do that.

MS. BROUWER: So for Action 1, that one is pretty straightforward. There are only two alternatives; no action or amend the ABC Control Rule as suggested by the IPT. That would be pretty straightforward. We would still need a motion to go ahead and adopt a preferred.

DR. DUVAL: Is there a desire on the part of the committee to select a preferred alternative under Action 1? Hopefully, there is. What we have done is we've accepted the IPT's proposed restructuring of the alternatives. Action 1 is now just to amend the control rule. Your no action alternative leaves the control rule as it is. Alternative 2 adds the ORCS approach as Level 4 within the control rule. Presumably, if we want to move forward with using the ORCS approach, it would be useful to select Alternative 2 as a preferred, which would add that ORCS approach to the control rule. Doug.

MR. HAYMANS: Madam Chair, I'd make a motion that we select Alternative 2 under new Action 1 as our preferred.

DR. DUVAL: Seconded by Anna. Is there discussion? Is everybody clear on what this does now? This simply adds the ORCS approach to the ABC Control Rule. **Is there any opposition to this motion? Seeing none; that motion stands approved.**

MS. BROUWER: So then the next step is to look at Action 2, and this is where you do need to pick preferreds for those four alternatives that are based on the risk of overexploitation. The way that we have structured, you're going to have to pick a preferred subalternative for each of the alternatives since they each correspond to a particular risk of overexploitation. For Alternative 2 there are only two subalternatives; either use a scalar of 0.75 for bar jack or 0.9.

DR. DUVAL: So Alternative 2 deals only with those species that have a low risk of overexploitation, and we only have one species in that category right now. The AP recommended a risk tolerance scalar of 0.9, I believe, for these species. Anna.

MS. BECKWITH: I move we select Subalternative 2b and apply a risk tolerance of 0.9 to low risk of overexploitation species.

DR. DUVAL: There is a motion by Anna; seconded by Chris. **The motion reads select Subalternative 2b as the preferred under Alternative 2. It is a motion by Anna and seconded by Chris. Discussion? Any objection? Seeing none; that motion stands approved.**

MS. BROUWER: Alternative 3 has the species that are under a moderate risk of overexploitation; and there are again just two subalternatives; applying a risk tolerance scalar of 0.75 or applying a risk tolerance scalar of 0.80. These are the tables with their corresponding changes in ABC for those two subalternatives.

DR. DUVAL: So again we're dealing just with the moderate risk of overexploitation species. I believe the AP's preferred was to apply a risk tolerance scalar of 0.8 for these species. Anna.

MS. BECKWITH: I move we select Subalternative 3B and apply a risk tolerance scalar of 0.8.

DR. DUVAL: There is a motion by Anna; seconded by Charlie. **Discussion? Any objection? Seeing none; that motion stands approved.**

MS. BROUWER: And finally for Alternative 4; this has the species that are under a moderately high risk of overexploitation. There are three subalternatives. Applying a risk tolerance of 0.7 is Subalternative 4A; 4B would apply a risk tolerance of 0.75; and Subalternative 4C would apply a risk tolerance scalar of 0.5.

MS. BECKWITH: What about the concern over hogfish being a little bit more risk of overexploitation than the rest of these? Can we do two separate scalars and separate hogfish out if that's desire of the committee?

MS. BROUWER: As Michelle explained earlier, the reason the AP had to make that distinction was because they were looking at the previous structuring of the subalternatives where hogfish was sort of in a different suite of species. It is hard for me to explain it; but the way we have it now it would correspond to Subalternative 4C. The AP wanted a risk tolerance scalar of 0.5, which is currently one of the options under Subalternative 4C.

DR. DUVAL: There is a typo I think in our version. We have two Subalternative 4Bs; so the second one should be Subalternative 4C.

MS. BECKWITH: But I think the AP suggested that rock hind and white grunt and scamp and gray triggerfish would be fine at 0.7 and only hogfish at 0.5. Can we separate out hogfish and apply a 0.5 scalar and maintain the rest of those species at 0.7.

DR. DUVAL: I think probably if that's – I mean I think we can certainly do that. This sort of gets back to the question of right now we don't have any species that are in the high risk of overexploitation. I don't know if John or Luiz want to comment on this; if the committee could possibly suggest that hogfish be moved to a category of risk of high overexploitation.

DR. BARBIERI: Just a point that might help you in thinking about this is the fact that we have a quantitative assessment for hogfish underway right now. This is supposed to be completed in the spring and hopefully be presented to the SSC at the October meeting and then be available for your review of catch level recommendations by next December's meeting. I don't think that this discussion here would have for hogfish any long-term impact.

DR. CRABTREE: Well, let's talk about that a minute. Luiz, the hogfish assessment is going to be Gulf and South Atlantic and landings everywhere or how is it going to be?

DR. BARBIERI: Right now all the genetics have really identified three separate stocks. There is a Gulf stock, there is a South Atlantic stock and there is a North Carolina stock. Actually when you look, there is something in genetics a principle called "separation by distance". There is some metric that you use to see how long have these populations actually been separated and any probability that they're still inter-breeding.

DR. CRABTREE: So it still remains to be figured out?

DR. BARBIERI: No, no; and all of this came out very conclusively those are three separate stocks. The SSC discussed this briefly at this last meeting and perhaps we should have updated you on this. We're going to be using two separate models and assess the Gulf separately from the South Atlantic. Then we are with North Carolina on how to proceed. We don't have enough information from North Carolina to conduct a quantitative assessment; so we're going to discuss we handle that. We've been talking to Chip about how we're going to handle that.

DR. CRABTREE: Well, I'm wondering if we just take hogfish out of this amendment for now. That would seem to be – does that seem to be a reasonable thing to do and then we revisit when we have the assessment; deal with it separately?

DR. BARBIERI: Yes, to me that makes sense.

DR. CRABTREE: Would you like a motion to remove hogfish from Amendment 29?

DR. DUVAL: I would love a motion but there are a couple of hands up, so let me get to those first. David.

MR. CUPKA: I was going to see if we wanted to go ahead and remove gray triggerfish since we've got an assessment scheduled for it – it is not as far as hogfish, perhaps – or do you want to wait until we actually get the assessment?

DR. DUVAL: In terms of the timing of this amendment, we probably wouldn't have regulations in place until 2015. The assessment is slated to start August of 2014, which means it won't be done until almost the end of 2015; and then it's 2016 – before the results of the assessment would go in 2017?

MR. CARMICHAEL: What I'm saying is if you get the assessment at the end of 2015; you will be making regulations during 2016, and it will go in for 2017. You've got a couple of years on that one, it seems to me.

DR. DUVAL: Doug, was that your question as well? How do you all feel about leaving gray triggerfish in there for now since it is going to be a couple of years before we get anything back? I'm seeing heads nod; okay. Dr. Crabtree, did you want to make a motion?

DR. CRABTREE: Yes; I'll move that we remove hogfish from Amendment 29.

DR. DUVAL: Motion by Roy; seconded by Zack. Any further discussion on that motion? Jim.

MR. ATACK: One of the other discussions we had and made a motion was to look at the council increasing the minimum size for hogfish from 14 to 18, in that range. If we remove hogfish from this amendment, could those changes have been made in this amendment or when –

DR. CRABTREE: Well, let me tweak my motion that I'm talking about; is this Action 1 or Action 2 –

DR. DUVAL: Action 2.

DR. CRABTREE: **That we remove hogfish from Action 2 of Amendment 29.** Then if they want to do something with the size limits, they can still do that.

DR. DUVAL: Roy has tweaked his motion and Zack agrees. Jessica.

MS. McCAWLEY: I don't think we should talk about the size limits now. Hogfish is going to be discussed at the South Florida/Goliath Joint Committee Meetings. We have already pushed it to that committee. I think we should just let those committees discuss it and move from there.

DR. DUVAL: I think that's a wise move. Roy.

DR. CRABTREE: Well, if that's the consensus of the council; I can tweak my motion back to removing it entirely if you want. Let's pass this and we'll come back to it.

DR. DUVAL: Is there any other discussion on this motion? **The motion reads remove hogfish from Action 2 in Amendment 29. Is there any opposition to this motion? Seeing none; that**

motion stands approved. This only removes hogfish from the application of the ORCS. Jessica.

MS. McCAWLEY: Maybe I'm in the wrong version of the document; but I thought Action 2 was modify the measurement method for gray triggerfish and establish a size limit.

DR. DUVAL: We've restructured the actions now; so Action 2 is now dealing with the application of the different risk tolerance levels.

MS. BROUWER: Now we would need a motion to select a preferred under Alternative 4.

MS. BECKWITH: I move we choose Subalternative 4A and apply risk tolerance scalar of 0.7 to moderately high risk of overexploitation species.

DR. DUVAL: There is a motion by Anna; seconded by Ben. Is there any other discussion on the motion? Charlie.

MR. PHILLIPS: Well, we've been running on scalars of 0.75, and I'm inclined to stay with Subalternative 4B; so I'm going to vote against it.

DR. DUVAL: Is there any other discussion or thoughts on that? Is everybody ready to vote? Do you need more time to think about this? **Could I please see a show of hands of those in support of this motion; those opposed. Eight to two; the motion passes.**

MS. BROUWER: Well, what will become Action 3, currently Action 2, is to modify the measurement method for gray triggerfish and establish a size limit. You have the way that it was worded and then the IPT is recommending just some clarifying language as you see on your screen and to obviously renumber it as Action 3. Alternative 1 is currently the minimum size limit for gray triggerfish is specified in inches total length in federal waters off East Florida only. In Florida state waters the minimum size for gray triggerfish is specified in inches fork length.

The minimum size is 12 inches total length in federal waters off East Florida and 12 inches fork length in East Florida state waters. Alternative 2 would specify a minimum size limit for gray triggerfish of 12 inches fork length in federal waters off East Florida. Alternative 3 would specify a minimum size limit of 12 inches fork length in federal waters off North Carolina, South Carolina, Georgia and East Florida; so it would take that minimum size limit and apply it off the coast of all the South Atlantic states.

The Snapper Grouper AP recommended a minimum size limit of 14 inches for gray triggerfish in federal waters off the four South Atlantic states. This is an action that was originally included in Regulatory Amendment 14. You voted to take it out of that amendment pending the stock assessment for gray triggerfish that as we know has been delayed.

The analysis that's in here contains what that conversion would do. You can see Table 5 right here from the SEDAR 32. It applies the conversion from total length to fork length. I should also mention that this analysis is based on the current ABC for gray triggerfish. We are aware

that we'll have to conduct more analysis to tier it off your preferred in Action 2; so what the new ABC would be based on your risk tolerance level and present those analyses in here as well, but that has not been done yet. I just wanted to make sure that I brought that to your attention.

DR. DUVAL: Can we pause for a question from Jessica?

MS. McCAWLEY: I didn't have a question; I was going to make a motion.

MR. BOWEN: Maybe Jim can discuss this; where did the AP or how did the AP just come up with the 14 inches; how was that derived? The recommendation is 14 inches, and I just would like some explanation of where that came from.

MR. ATACK: Yes; it goes back when we talked about it in previous meetings and then this past meeting. The yield 12 inch versus 14 inch; the yield is a lot different. It was pretty much unanimous across the AP that by going to 14 inches, they're a hardy fish, the bycatch mortality is low, the yield at the fish house is better for the larger fish. By doing that, it would help conserve the resource; you're MSY would be better down the road. It seemed like the thing to do from the yield, the biology of the fish.

MS. McCAWLEY: To that point, also in Florida on the Gulf Coast they have a 14-inch fork length minimum size limit.

DR. DUVAL: Does that answer your question, Zack? Myra, would you like a motion at this point to accept the IPT's modifications to this action? Can I get a motion? Jessica.

MS. McCAWLEY: So moved; and I'm ready to make a motion to pick a preferred also, if you'd like that at the same time.

DR. DUVAL: Let's go ahead and deal with this one first and then we'll pick a preferred after that. **There is a motion by Jessica to accept the IPT's proposed changes; seconded by Charlie. Discussion? Any objection? Seeing none; that motion stands approved.** Jessica.

MS. McCAWLEY: I would like to make a motion to accept Alternative 3 – I think we're under new Action 3 – as the preferred.

DR. DUVAL: **There is a motion by Jessica to select Alternative 3 under new Action 3 as a preferred. This would specify minimum size limits for gray triggerfish of 12 inches fork length in federal waters off all the states. Seconded by Zack.** Discussion? Doug.

MR. HAYMANS: So then that would be not considering the AP's recommendation to go to 14?

MS. McCAWLEY: That's correct; but I'm willing to accept a friendly amendment if you would like to consider 14. That certainly works for Florida; but I'm just trying to defer to what is best for the states. That would be best for Florida because that would put us the same on both coasts.

MS. BROUWER: Currently we don't have an alternative for a 14-inch minimum size limit; so if you want to do that, we would need guidance to add that as an alternative and then select it as a preferred. Also, we haven't obviously done the analysis for that yet; but it would be done in time for the public hearings.

MR. COX: I would just like to see us go with that 14. Just like he was saying; the yield on a 12-inch triggerfish is not very much. When we're fishing inshore and when the current is running and catching those vermilions and we're interacting with those triggerfish, they are a hardy fish, they do live well. The 12-inch just does not give you enough and I just don't see any value in killing those fish.

MS. McCAWLEY: I'm perfectly fine with that; but also know that just by going from 12-inch total length to 12-inch fork length, we have increased the minimum size of that fish a little bit because of the conversion and the length of the filaments on the tail. I'm perfectly fine with going to 14; I just wanted to clarify that.

MR. COX: Okay; I thought we were talking fork length, anyway.

MR. BOWEN: That was going to be my point; and I'm not perfectly fine with it. I really would like to see 12 inches across-the-board fork length for all the states. If Jessica is going to withdraw her motion**, I would make my motion to keep it at 12 inches.**

DR. DUVAL: Your motion was to select Alternative 3, which was 12 inches fork length in federal waters, right.

MR. BOWEN: And I seconded.

DR. DUVAL: So what Zack is saying is if you were going to withdraw that motion to add an action for a 14-inch size limit, he would not support that.

MS. McCAWLEY: No; and Myra said that had to be done separately, anyway, so I want to stay with what I've already made the motion for.

MR. BOWEN: Then I want to stay with my second.

MR. CUPKA: Well, go ahead and deal with this. I was prepared to make a motion to add another alternative that we could take out that would increase it to 14. I would deal with this first.

DR. DUVAL: Are there any other comments on this motion? Zack.

MR. BOWEN: I just would like everybody to keep in mind we're going from no minimum size in three states now; but with this motion to 12 inches, we are gaining a little bit here.

MR. PHILLIPS: And this might be good because we're going to come back and change this when we get our new assessment, anyway. By the time we do this, this is only going to take effect for a year or so. We're coming back to this; and this might be a good step.

DR. DUVAL: Okay, is there any other discussion? **Can we vote on this? Is there any opposition to this motion? Seeing none; that motion stands approved.** David, did you want to make another motion?

MR. CUPKA: Madam Chairman, I would like to add an Alternative 4 that would read the same as Alternative 3 except it would be for 14 inches; to take that out and get comment on.

DR. DUVAL: **There is a motion by David to add a new Alternative 4, seconded by Mel, that would read the same as Alternative 3 with the exception that it would state a 14-inch fork length minimum size limit. Further discussion on that motion? Any opposition to that motion? I see one opposed; the motion passes.**

MS. BROUWER: Okay, moving on, Action 3 to be renumbered as Action 4 would establish a commercial split season for gray triggerfish. There are currently just two alternatives, and the IPT is recommending adding a third. Alternative 1 is no action; the commercial ACL is allocated for the entire year.

Alternative 2 would allocate the directed commercial gray triggerfish ACL 50 percent to the period January through June and 50 percent to the period July through December; and any remaining ACL from Season 1 would transfer to Season 2. Any remaining ACL from Season 2 would not be carried forward. This is the same thing you have vermilion snapper set up.

The one we're recommending adding would allocate the directed commercial gray triggerfish ACL X percent to that first six months and X percent to that second six months. We have Xs there to allow us to do some analysis to look at the distribution of landings; but just having a placeholder alternative in there would probably be a good idea.

The Snapper Grouper AP did not feel they could recommend other alternatives as they didn't have the distribution of the landings at the time they discussed this during the meeting. They did note that they are catching larger triggerfish.

There was concern about triggerfish closing in March or April under the proposed split season; and that would affect availability of product for the seafood market. The AP recommended Alternative 2 as the preferred. They also wanted you to consider a spawning season closure for the commercial sector. They also discussed reducing the bag limit of gray triggerfish to eight fish.

DR. DUVAL: I think at this point we would need a motion from the committee to accept the IPT's recommendation to add another alternative so that they could do some analysis regarding distribution of landings as well as selection of a preferred alternative. Doug.

MR. HAYMANS: Madam Chair, I would move that we accept the IPT's recommended wording for an additional Alternative 3.

DR. DUVAL: Motion by Doug; seconded by David. **Further discussion? Any opposition? Seeing none; that motion stands approved.** Does the committee want to select a preferred alternative for this? Charlie.

MR. HAYMANS: I would like to see some of the analysis first.

DR. DUVAL: That's why I asked it as sort of a question. We have gone out to public hearing without selecting preferred alternatives. Is that okay, Myra?

MS. BROUWER: Yes. The next action would establish a commercial trip limit for gray triggerfish. We have two alternatives. We are recommending adding a third one. Alternative 1 is no action; there is no commercial trip limit for gray triggerfish in the South Atlantic Region. Alternative 2 would establish a commercial trip limit, and there are three subalternatives; 2A for 500 hundred points; 2B, 1,000 pounds; and 2C, 1,500 pounds.

The IPT is recommending Alternative 3, which reads when 75 percent of the gray triggerfish commercial ACL is met or is projected to be met, the trip limit is reduced to – and then there are subalternatives for various poundages. The Snapper Grouper AP discussed this action. They indicated the average trip in North Carolina is from about 800 to a thousand pounds.

One AP member stated that a 1,000 pound trip limit would be fine. They made a motion that the council should consider a trip step-down alternative. They suggested 75 and 85 percent and then whatever poundage limits would be appropriate; and that was approved. They also recommended a commercial trip limit of 1,000 pounds; so Subalternative 2B.

DR. DUVAL: I think the first motion we would need is one to accept the IPT recommendation to add a new Alternative 3. Doug.

MR. HAYMANS: **Madam Chair, I would move that we accept the IPT's recommendations for a new Alternative 3.**

DR. DUVAL: Motion by Doug; seconded by Ben. Discussion? Myra, do you need further guidance from the committee as to what those other step-down alternatives might be?

MS. BROUWER: If you would like to provide that guidance, that would be good; but if not, I think the IPT could come up with a reasonable range.

MR. COX: I would like to see a step-down of something like 500 pounds, if we could, when 75 percent is met.

DR. DUVAL: So guidance to look at a step-down of 500 pounds. Charlie.

MR. PHILLIPS: If you're going to do that, then you'd end up with 200, 500 and maybe go to 750, which would be a 50 percent step-down if you have a 1,500 pound trip limit; just anywhere in that range.

DR. DUVAL: Okay, Myra, is that good for you in terms of guidance? Okay, we don't need a motion then on that and guidance is good enough in terms of the step-downs? Did we vote on the previous motion?

MS. McCAWLEY: Can you read it again; I can't see it.

DR. DUVAL: **The motion reads accept the IPT's recommendation to add Alternative 3, which would establish a range of step-downs when 75 percent of the ACL is met. Is there any other discussion on that motion? Any opposition? Seeing none; that motion stands approved.** Are you prepared at this point to select a preferred alternative or do you propose to wait? Charlie.

MR. PHILLIPS: Again, I would like to wait for the analysis.

DR. DUVAL: Do other folks feel the same way? Okay, we will not select a preferred alternative for this action. I believe that might be it. Doug.

MR. HAYMANS: Madam Chair, we didn't consider the AP's request for us to consider an eight-fish bag limit; and I assume that's pulling eight triggerfish out of a twenty-fish aggregate. At least let's consider it and move on.

DR. DUVAL: Would you like to add an action to this amendment?

MR. HAYMANS: No, just some discussion from the committee as to whether we want to do that. I'm not necessarily in favor of it; but at least it was an AP request.

DR. DUVAL: And while we're discussing; they also recommended a spawning season closure; so discuss away. Jessica.

MS. McCAWLEY: I just think we should wait on those items until after we get that assessment even though we know the assessment is being delayed. We already decided to wait to go from 12 to 14 because it would only be in place for a short period of time before we get that assessment and then really decide what we need to do.

MR. BELL: Yes, I would agree with Jessica. I don't think I have enough information to say eight is a good number or ten is a good number or twelve or whatever. We probably ought to just wait until after the assessment and then kind of look at it.

MR. PHILLIPS: My comment is ditto.

DR. DUVAL: Awesome; I love brevity. All right, we will wait until after the assessment before considering those actions, but we'll keep them in the mix. We need to approve this for public hearings in January. Jessica.

MS. McCAWLEY: I move to approve the document for public hearings in January.

DR. DUVAL: Motion by Jessica; seconded by Charlie. Discussion? Opposition? Jim.

MR. ATACK: I guess before we approve this; one of the other actions the AP had recommended was the council consider the minimum hogfish size. I know you talked about that earlier; but if you put that as an action to go out to the public that we're looking at changing the size to 14 or 18, you could get some public comment on that. The assessment is going on. By the assessment comes in, you will have public comment and then you could maybe make a decision with this amendment if you take that route.

MS. McCAWLEY: I'm against that. I'm not ready to do it. I want the South Florida Committee to meet. There are a lot of other issues going on with hogfish. I'm against doing that.

MR. BOWEN: I agree; I'm against it as well.

DR. DUVAL: Again, this is an issue that's being discussed by the South Florida Committee so we'd like to get their input before making any recommendations for actions is what I'm hearing.

MR. HARTIG: In deference to Jim, what happens if the assessment comes back and there are a whole suite of things we have consider. We're going to have to go back out, anyway; and that's really what we're thinking is that there are probably going to be – after the assessment if we have to do something, then we'll have to look at a whole different suite of options to try and deal with. That's why we probably didn't want to do it now.

DR. DUVAL: And this is proving to be a little bit complicated given the genetics of the stock, anyway. **Any opposition to this motion? Seeing none; that motion stands approved.** We have last piece of business, which I'm hoping can be fairly brief. Brian is coming up here to discuss the pre-scoping options paper for the Generic Allocations and Accountability Measures Amendment.

While Brian is coming up here and getting ready, we had some discussion about allocations during our visioning discussion on Monday and how we wanted to make sure that any discussion on allocation is incorporated into visioning and get out too far ahead of that. There are several different options within the paper that Brian is going to review for us.

I think really what the committee needs to decide is would you want to take these options out to scoping with the specific caveat that this is going out for scoping so that any comments that we get back could be folded into that visioning discussion. I think that is the kind of input we need from the committee here. Brian.

DR. CHEUVRONT: Attachment 11 is sort of a pre-scoping options-type paper. The first page, which runs just a little over a full page, gives you a little bit of background of where we kind of stand with this. Michelle gave a good introduction to where we are at this point. The big thing right now is we have accountability measures as the first action. Just to get you up to date on where we with that, if you'll remember in Dolphin Wahoo 5 and in a precious CMP Plan, you changed the accountability measures so that the criteria for when the accountability measures kick in to only occur if the stock is overfished and the entire ACL is exceeded.

You did that for the CMP species as well as dolphin and wahoo. There was some discussion that you all wanted to consider that pretty much across the board for the other species. That first action that is in this amendment basically allows you the opportunity to do that for the remaining species like the snapper grouper species and golden crab.

The remaining actions in the amendment are all allocation actions. Now, this is going to come up again in dolphin and wahoo because there is a dolphin and wahoo action in here as well; so we'll discuss that when we get to that committee later today. The way things are set up now is that it mirrors what is currently what you all did in the Comprehensive ACL Amendment a couple of years ago that was based totally on landings.

You had a long-time time series and a short-term time series. At that time your data went through 2008; and so Alternative 2 and the various subalternatives allow you to sort of mess around with those dates and change those time periods. Now, there is a typo in those. There is one place where it does say 2008 was the last year of data. It is actually 2012.

Basically that just shows you that I literally copied that straight from the Comprehensive ACL Amendment, and I neglected to change that one date; so don't get confused by that one. But in doing this the concern was if we keep it as it is now, all we have to go on are landings' statistics. Now, landings' statistics you can go through basically 2011's data; but the Comprehensive ACL Amendment put in these ACLs that now has – through management we have manipulated what people can catch.

And so to use those numbers from 2012 and beyond to help determine allocations, you've got another layer of complications there that you didn't have previously. If you want to go with landings, you really can only use 2011 because the game changed by the time you got to 2012. The efficacy of using landings, it might be okay for right now; but what are you going to do five years from now when those landings and those allocations based on those landings are way out of date?

If you're still relying on landings and you've got this artificial control over how much the sectors can land, that is not going to be very helpful to you. In thinking about this, we're thinking about, well, you know, this is something that you all might want to consider as part of your visioning process. We all know that once we get into the meat of this, it is going to be painful no matter how we deal with it.

The IPT and several other folks are thinking that perhaps the best thing is get your visioning, find out what you want to do, and then come up with some alternatives that we can include in there.

I'm not suggesting that we drop the landings' stuff. I think you need to consider that because that is very similar to what you currently have in place; but I can't imagine anybody is going to want to go through this on landings now and then only have to come back and revisit it again in a couple of years. That is kind of what I'm suggesting that you all consider.

There is the possibility of taking this out to scoping still. We have scoping scheduled via webinar because that's basically the way we're doing scoping now. I think February 3rd is the date that we're using now to do this by webinar. We can still go ahead and do that and try to get some information from the public that might be helpful to you in terms of your visioning process. We might pull in some people that you might not have reached otherwise that maybe can give you some ideas on how to approach allocations.

I kind of wanted to leave it with that and let you discuss where you want to go with this. I'm happy to do whatever. I just want to say, though, that if you decide that you want to go and you're trying to get some visioning ideas from taking this out to scoping, when we do the scoping document it will be written in such a way that it is designed to elicit as much input from the public on how the council ought to approach the idea of scoping, knowing that all they've used in the past is historical landings.

DR. DUVAL: That is very informative and helpful. I think we have two options here. We could continue with the scoping and have the document that is presented during the scoping webinar be prefaced such that it indicates that the reason this is being taken out for scoping is to inform the visioning process during which allocations would be discussed at port meetings; or, if the committee so chooses, you can hold off on this until after there is input from the port meetings. Brian.

DR. CHEUVRONT: There is one other point that I wanted to make. You could take this out to scoping now to get your additional information; but that doesn't preclude you from taking it out to scoping again later depending on the outcome of your visioning process. If you still want to tweak it a little bit and make sure that you feel comfortable with what the public has suggested and what the visioning process has come up with, don't think that you go to scoping once, that's it. You can go out again if you want; that's no problem.

MR. HAYMANS: I hesitate, of course, but it is a close battle for which is more controversial, MPAs or allocations. We postponed MPAs until after the visioning and I'd almost say do the same thing with allocations.

MS. BECKWITH: I disagree on that one. I like the idea of taking this out to webinar. I think if this comes up in visioning for discussions; I think we're going to need some context in how to present it versus we have context on the MPAs. We keep saying that the cat is out of bag and people are semi-informed that this is coming down the pike; and I'm not sure that is the case for allocations. I would be in support of seeing the webinar go through on February 3rd as kind of a first step.

MR. HARTIG: Anna, I appreciate that, but the experience of dealing with big-ticket items on the council and having MPAs and allocations being discussed at the same timing, I don't think

it's fair to the public to be able focus on one or the other. Those are two very, very important and controversial subjects that the council has to deal with and the public has to deal with. I would rather see the allocation go on a slower track. It is really a bit much from my perspective.

DR. DUVAL: Just to remind folks that yesterday the committee voted to delay scoping of Regulatory Amendment 17 for MPAs until August; so your suggestion, Ben, would be delay this until after that, even? Okay, I just want to be clear. Jessica.

MS. McCAWLEY: I have to agree with Doug. From my experience especially with the Gulf Council, this is a very touchy issue; sometimes maybe even more so that closed areas. If Ben is recommending that it go after the visioning and then after the MPA stuff, then I would support that.

MR. PHILLIPS: Yes, I agree with Ben. It could very easily end up being the central thing in visioning and we don't want that. We want the mix of stuff; so, yes, I'm with Ben.

MR. BELL: I would agree; I think allocations is sort of a core issue and I think it will elicit a lot of emotion and core response; so it would be best to deal with this a little bit later.

DR. DUVAL: All right, what I'm hearing is that folks would like to delay consideration of taking allocations out to scoping until we can get input from visioning. We do need some kind of motion in terms of delaying this for timing. I know you'd like to delay it, but until when? I think that's the question. Jessica.

MS. McCAWLEY: Then I would make a motion to delay public scoping on this item – do you want me to pick an actual council meeting; is that what you're after or do you want me to just say until –

DR. CHEUVRONT: You don't have to – I wouldn't pick a specific time; but if you figure out what is the sequence of events. Ben has said wait until after you deal with the MPA issue. So it would be after visioning is done; and do you want it to wait until the MPAs have been taken out for scoping or after MPAs have gone out for public hearing or MPAs are finished or how do you want to deal with this? I think that's going to help the council figure out the timing of when we need to make this active again.

MS. McCAWLEY: My goal is to get a motion so that it's after MPAs are completely finished; so I would delay public scoping until after visioning and after the MPA discussions are completed.

DR. DUVAL: Okay, a motion by Jessica; second by Ben. The motion reads delay public scoping until after visioning and until after the MPA discussions are completed. Is there anymore discussion on this motion? Roy.

DR. CRABTREE: I'll just weigh in that postponing difficult things like this I don't think does a whole lot of good. If this is something we feel like we need to look at it, based on that, we're

kicking this two years down the road, I'd guess. I'm afraid we're getting a little too wound up on trying to avoid controversy. I'm not sure that is going to help us in the long run.

MS. McCAWLEY: I'm willing to face a controversy head on but not if we're going to spend this kind of money on visioning and give this a fair shake. To me that's why we're postponing this item and not just because it's a difficult item.

MR. HAYMANS: Just to Roy's point, I think they're allocated now. I don't know how much reallocation there is actually going to be when it's all said and done. It's tweaking, I think, but that's about it. I don't see it personally as it being an immediate topic. I know there is a lot of call for it, but I don't see where we're going to make a lot of changes.

DR. CHEUVRONT: I also want to remind you of one thing. While it is not relevant specifically to this committee, but there is a dolphin allocation action that is in this; and last June you pulled that action out of Dolphin and Wahoo Amendment 5 because you said you were going to deal with it this fall in this amendment.

Now, if the council decides to go ahead with this, then you're telling also the dolphin and wahoo folks that you're going to wait until later also to deal with their allocation issue that has been on the burner for them for several years. The Dolphin Wahoo AP has made recommendations repeatedly to address this issue.

MR. HARTIG: That is an interesting wrinkle in it. Roy, it's not that we're not facing the difficult things we have to deal with. MPAs and allocations; they suck the energy out of everything we do during those timeframes. If you put them both together, then we won't be able to do anything else. The public will never talk about anything else.

MS. BROUWER: I just also wanted to remind you that we still have the issue of making consistent accountability measures for snapper grouper species. As we heard yesterday, we still have things on the books like we do for snowy grouper where we're using that three-year rolling average.

For some species we just recently – one of the amendments we did recently – I can't remember which – is looking at accountability measures kicking in if the total ACL is exceeded as opposed to the sector ACL. You have AMs that are kind of all over the place. I guess what I'm hearing is allocations maybe is something that ought to be delayed, but maybe you want to consider doing accountability measures and getting that out of the way.

DR. CRABTREE: Well, I hear what you're saying, Ben, but it seems to me there is always something that sucks the air out of the room. There was red snapper, there was black sea bass, there was Amendment 13C. It is the same thing in the Gulf; there is always something blowing up and that is just fisheries.

The main thing is be aware, though, that one of the criticisms nationwide of the councils is a reluctance to take on allocation issues. There is a lot of that going on. There is a lot of interest on the Hill.

We had a public hearing or had a hearing with the Senate, Ben, when you were there and some of the follow-up questions that came out of that had to do with are the councils reluctant and are they not wanting to deal with allocation issues. Just be aware that is out there; and this will probably play into that a little bit.

DR. DUVAL: And there was actually a study that George Lapointe, who was here at the council meeting earlier, was contracted to do marine fishery allocation issues; and I would strongly recommend that folks read that if they have not. Charlie.

MR. PHILLIPS: I don't think this stops us from looking at dolphin and wahoo allocations just because we're not going to look at the generic stuff. I don't think that precludes us from doing something there if we really want to or feel like we need to. As far as the AMs that Myra was talking about, yes, I think if we start making some work on that, we absolutely should.

MS. McCAWLEY: Well, based on what Myra said, couldn't we pull the AMs portion out of this or either keep it in and continue on with this amendment number. I would like to see us do that.

MS. BECKWITH: And in addition to those AMs, I would like to keep the dolphin and wahoo allocations in there.

DR. DUVAL: Okay, I see what you're saying, keep the accountability measures and the action on dolphin and action allocations in there. Jessica, I don't know –

MS. McCAWLEY: Do you want me to withdraw my motion and make another one?

DR. DUVAL: I'm thinking that might best if the seconder agrees with it.

MS. McCAWLEY: Well, maybe I can modify it and staff can help. Maybe we could continue with the accountability measures and the ACL modification for dolphin and then delay – and then keep the rest of that stuff – delay public scoping on allocations – keep the rest of that intact.

DR. DUVAL: Staff is helping out there and let's let them get this up and then we can read it. What Myra has up here is delay public scoping for allocations for snapper grouper species until after visioning and until after the MPA discussions are completed. Retain action on dolphin and wahoo allocations and snapper grouper accountability measures.

MS. McCAWLEY: That looks good.

MS. SMIT-BRUNELLO: I had a question for Myra. Is it just snapper grouper accountability measures or are there accountability measures that need to be addressed for other species?

DR. CHEUVRONT: It was also golden crab, which I just had her add to the motion.

DR. DUVAL: **Jessica, the motion would then read delay public scoping for allocations for snapper grouper species until after visioning and until after the MPA discussions are**

completed. Retain action on dolphin and wahoo allocations and snapper grouper and golden crab accountability measures. Does that satisfy?

MS. McCAWLEY: Yes.

DR. DUVAL: Is that okay with the seconder, Ben? Is there any other discussion? Chris.

MR. CONKLIN: It seems the way it has been going the past few years that we're probably never going to be done talking about MPAs; so this may never come up again.

DR. DUVAL: It just seems like that; that is a good point. Mel.

MR. BELL: So the logic in this is that the accountability measures are kind of a little separate and it is not quite as hot button a topic. The dolphin and wahoo was something we were already dealing with earlier; so that's the logic. All the rest is snapper grouper, which is what the visioning is about.

DR. DUVAL: Jack, last word and then we're voting.

MR. COX: I was just going to say I hate to see us keep using the visioning for an excuse to keep kicking the can down the road. We're going to have to deal with some issues; and I kind of take Roy's take on this. It is our job here to do this. I just wanted to throw that out there.

MR. HARTIG: Well, it is interesting; the young guard wants to move ahead and do these controversial things both at the same time. We'll see when we get to full council.

DR. DUVAL: All right, is everybody ready to vote? **Is there anybody in opposition to this motion? Seeing none; that motion stands approved.** Is there any other business to come before the Snapper Grouper Committee? Please say no. Chairman Boyd.

MR. BOYD: Just a comment. I didn't want to influence that vote a minute ago, but being in the middle of allocation discussions at the Gulf Council, I can tell you that at some point in time those discussions reach a critical mass outside of your council process. When that critical mass is reached, it is explosive.

You do want to deal with it; you don't want to postpone it forever. Roy is correct; if you keep postponing it for whatever reason, it will reach a critical mass either in the council, with the council members or outside the council. I just caution you not to, as Roy says, kick the can down the road too long. Whether you allocate, reallocate, don't reallocate, you need to at least address it.

DR. DUVAL: We very much appreciate the benefit of your wisdom. David.

MR. CUPKA: I was going to point out when Roy made his comment that Sam Rausch has reminded the CCC on several occasions here in the last couple of years that this is an issue that NOAA gets quizzed on all the time. Sam has partly told them, well, every time we do an

amendment, we go back and look at that, which actually I guess some of the congressional people has bought, but in actuality we don't and we need to start paying attention to that. I know NMFS is banged on at the highest levels on that issue, too.

DR. DUVAL: I think if we feel that we get enough input from visioning that we can take some concrete action moving forward, that does not prevent us from addressing allocation sooner.

MR. HARTIG: Great point, Madam Chairman. The question I had and I'd like to get answered on the record is to John or Luiz. We did the ORCS stuff and now we've got the last tier, which is no reliable catch stocks. Do you have a timeframe to look at those yet? We had some presentations about data-poor stocks at the last SSC meeting; and unfortunately I had to leave before I could hear those. I heard part of them over the webinar and those were very interesting conversations. Does the SSC have a timeline to move forward to look at those?

MR. CARMICHAEL: To like look at them in terms of how you could assess them?

MR. HARTIG: Look at them in terms of how we did the ORCS process where we brought fishermen in and maybe find some way to adjust the catch levels based on fishermen and SSC knowledge.

MR. CARMICHAEL: I don't think we have a timeline to do that to any greater extent than we did as part of the ORCS process. I think if anything we'd like to get those in place and then a couple of years down the road look at those.

The expectation is that if any new information comes available that would change any of the decisions that contributed to the ORCS decisions, life history or anything like that or major changes in the fishery, then we'd probably consider those as they arose.

The final part of it is the workshop that we're planning to have at the start of the April meeting to just talk about the overall comprehensive assessment scheduling process and to look at the top priority stocks; and as they mentioned, considering less data-intensive and computationally intensive approaches for a lot of these other stocks so we don't have so many species that are within the ORCS process overall.

I think their intention would be to overtime really move things out of ORCS, whether it's applying some of the data-poor methods that will be discussed at this workshop. We had an update at our SSC meeting about some methods, and then there is going to be a workshop down in Miami to look at a number of data-poor methods in depth. I think one hope there is to maybe come out of that with some tools that could be applied to a lot of these stocks maybe rather rapidly.

It is something that perhaps a SEDAR slot is devoted to a number of those stocks that has been discussed in the past and didn't go beyond the SSC request, but we might be getting to a point where we could do that. I think there are a lot of little tabs here converging on it with the ultimate goal of really getting things out of ORCS as probably being the preferred approach than tweaking any of those individual decisions within the overall ORCS decision framework now.

MR. HARTIG: That is a great way forward. However, we do have several stocks, in particular almaco, rudderfish, that have substantial landings that the current catch levels don't have anything to do with the productivity of either stock. Could it be possible to pick a couple of those stocks that are causing significant problems?

Like the jack complex closes in half the year since we implemented it and we're almost – I can't remember how many percent we're over, but we're over a lot in the jack complex; and that is because the productivity of those stocks was not taken into consideration when we set those ACLs for those particular stocks.

So, if we could at least a couple of species that we're having problems with at the council level to ask the SSC to take a look at as an interim measure to try and maybe get a more realistic appraisal of what these stocks could stand as far as effort goes.

MR. CARMICHAEL: I think if the council was to give a request back to the SSC that asked and maybe you ask them to look at ones that had closures where the ACL was based on ORCS. I think one of our risks that people who view it from a different perspective may bring to our attention if we try to do that would be the blueline tilefish example where a similar situation, just looking at landings and attempting to infer productivity from landings, it is pretty apparent now that we went too far and set the limit much higher. I think that will work against efforts to maybe raise some of these even higher, possibly. But having the SSC look at it to me is the appropriate approach.

DR. DUVAL: Is there any other business to come before the Snapper Grouper Committee? Seeing none; the committee stands adjourned.

(Whereupon, the meeting was adjourned at 10:07 o'clock a.m., December 5, 2013.)

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Fisheries Social Scientist
Dr. Kari MacLauchlin
kari.maclauchlin@safmc.net

Staff Economist
Dr. Brian Cheuvront
brian.cheuvront@safmc.net

Science and Statistics Program Manager
John Carmichael
john.carmichael@safmc.net

SEDAR Coordinators
Dr. Julie Neer - julie.neer@safmc.net
Julia Byrd – julia.byrd@safmc.net

SEDAR Admin/Outreach
Andrea Grabman
andrea.grabman@safmc.net

Administrative Officer
Mike Collins
mike.collins@safmc.net

Financial Secretary
Debra Buscher
deb.buscher@safmc.net

Admin. Secretary /Travel Coordinator
Cindy Chaya
cindy.chaya@safmc.net

Purchasing & Grants
Julie O'Dell
julie.odell@safmc.net

PLEASE SIGN IN

So that we will have a record of your attendance at each meeting and so that your name may be included in the minutes, we ask that you sign this sheet for the meeting shown below.

South Atlantic Fishery Management Council
December 2013 Meeting

Snapper Grouper Committee:

~~Wednesday~~ Thursday, December ~~4~~ 5, 2013

NAME & ORGANIZATION	AREA CODE & PHONE NUMBER	EMAIL ADDRESS	P.O. BOX/STREET CITY, STATE & ZIP
Rusty Hudson SFAECFS	386-239-0948	2547 2009@aol.com	32120-9357
Emily Helmick PEW			
Bill Kelly	305-619-0039	FKCFA1@Hotmail.Com	
Leda Dunmire	305-393-0934	LDunmire@pewtrusts.org	
Liam Carr	843.819.8169	lcarr@pewtrusts.org	PO 609, Shas. SC 29402
Dick Brame	910-540-5245	CCA	
JON PAUL BROOKER OCEAN CONSERVANCY	7272860338	jbrooker@oceanconservancy.org	
Susan Shipman	912 222-9206	susanshipmen@att.net	St. Simons Isl GA

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South Atlantic Fishery Management Council
December 2013 Meeting

Snapper Grouper Committee:
Wednesday, December 4, 2013

NAME & ORGANIZATION	AREA CODE & PHONE NUMBER	EMAIL ADDRESS	P.O. BOX/STREET CITY, STATE & ZIP
Rusty Hudson 57HECTS	386-239-0948	257 2009@aol.com	32120-9351
Liam Carr	843-819-8169	lcarr@peertrusts.org	PO 609, Chas. SC 29402
Kenny Fex	910-620-5847	Kennysurffex@gmail	122 NE 38th St
George Sedberry			
Emily Hemrick Pew			
Chip Collier NCDMF			
Bob Loring CCANC Board			Wilmington, NC
Tony Austin	9103261293	mchess@ec.rr.com	Hubert NC
Scott Baker	910-962-2492		

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South Atlantic Fishery Management Council
December 2013 Meeting

Snapper Grouper Committee:
Wednesday, December 4, 2013

NAME & ORGANIZATION	AREA CODE & PHONE NUMBER	EMAIL ADDRESS	P.O. BOX/STREET CITY, STATE & ZIP
Gretchen Martin EDF			
Susan Shipman	912-222-9206	susanshipman@attinet	St. Simons Isl GA
Alberto Solana	9085613061	Albieso@gmail	

South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
North Charleston, SC 29405
843-571-4366 or Toll Free 866/SAFMC-10

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South Atlantic Fishery Management Council
December 2013 Meeting

Snapper Grouper Committee:
Tuesday, December 3, 2013

NAME & ORGANIZATION	AREA CODE & PHONE NUMBER	EMAIL ADDRESS	P.O. BOX/STREET CITY, STATE & ZIP
Blake Price NMFS	228-369-8194	blake.price@noaa.gov	Beaufort Lab, NC
Nick Hopkins NMFS	228 549 1767	nick.hopkins@noaa.gov	202 Delmas Av Pascagoula MS
Leda Dunmire Pew	305-393-0934		
Dick Brame	910-599-5241		
Rusty Hudson SFAECFS	386-239-0948	As72009@aol.com	32120-9351
Liam Carr	843-819-8169	lcarr@pewtrusts.org	PO 609, Chas SC 29402
J.P. BROOKER - OCEAN CONSERVANCY	7272860338	jbrooker@oceanconservancy.org	449 CENTRAL AVE., #200 ST. PETERSBURG, FL 33701
Jim Atack	910-520-8279		
Chip Collier NCDMF	910 796-7291	chip.collier@ncdenr.gov	

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South Atlantic Fishery Management Council
December 2013 Meeting

Snapper Grouper Committee:

Tuesday, December 3, 2013

NAME & ORGANIZATION	AREA CODE & PHONE NUMBER	EMAIL ADDRESS	P.O. BOX/STREET CITY, STATE & ZIP
Tom Burgess	910-327-3526	tbburgess@embarqmail.com	Box 33 Sneads Ferry, NC 28460

South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201
North Charleston, SC 29405
843-571-4366 or Toll Free 866/SAFMC-10

66	Lloyd, Vic	vic_lloyd@bellsouth.net	161 min
61	raine, karen	karen.raine@noaa.gov	518 min
58	currin, mac	maccurrin@gmal.com	108 min
58	mershon, wayne	kenyonseafood@sc.rr.com	445 min
57	Mehta, Nikhil	nikhil.mehta@noaa.gov	486 min
49	Martin, Gretchen	gmrtin@edf.org	63 min
41	burton, michael	michael.burton@noaa.gov	198 min
40	Cheshire, Rob	rob.cheshire@noaa.gov	134 min
38	Swatzel, Tom	tom@sustainablefishing.or…	196 min
38	Bresnen, Anthony	anthony.bresnen@myfwc.com…	510 min
38	Fey, Kasey	kfey21@yahoo.com	494 min
37	Merrifield, MIke	mikem@wildoceanmarket.com…	367 min
37	E, A	annemarie.eich@noaa.gov	476 min
37	Bademan, Martha	martha.bademan@myfwc.com	526 min
36	Moe, Heather	heather.moe@noaa.gov	20 min
36	Katz, Robbie	rnkatz@emory.edu	44 min
36	DeVictor, Rick	rick.devictor@noaa.gov	212 min
36	holiman, stephen	stephen.holiman@noaa.gov	426 min
35	Stump, Ken	magpiewdc@gmail.com	484 min
35	MacLauchlin, Bill	billmac@charter.net	414 min
33	merrifield, jeanna…	jeannam@wildoceanmarket.c…	571 min
32	Michie, Kate	kate.michie@noaa.gov	436 min
32	Helies, Frank	fchelies@verizon.net	465 min
31	Crosson, Scott	scott.crosson@noaa.gov	470 min
31	Kellison, Todd	todd.kellison@noaa.gov	520 min
31	holland, jack	jack.holland@ncdenr.gov	321 min
30	meyers, steve	steve.meyers@noaa.gov	325 min
29	Ballenger, Joseph	ballengerj@dnr.sc.gov	561 min

28	Takade-Heumacher, …	htakade@edf.org	437 min
28	Gore, Karla	karla.gore@noaa.gov	426 min
27	Denit, Kelly	kelly.denit@noaa.gov	368 min
27	Knowlton, Kathy	kathy.knowlton@gadnr.org	190 min
27	Ting, Alex	alex_ting@comcast.net	57 min
27	sandorf, scott	scott.sandorf@noaa.gov	437 min
27	David, Andy	andy.david@noaa.gov	13 min
26	Byrd, Julia	julia.byrd@safmc.net	319 min
26	Zoodsma, Barb	barb.zoodsma@noaa.gov	24 min
26	Herndon, Andrew	andrew.herndon@noaa.gov	305 min
25	Package-Ward, Chri…	christina.package-ward@no…	142 min
24	Newman, David	dnewman@nrdc.org	198 min
23	McNair, Taylor	tmcnair10@gmail.com	54 min
21	Tat, Sarena	sctat@emory.edu	46 min

68	Ballenger, Joseph	ballengerj@dnr.sc.gov	80 min
62	Mehta, Nikhil	nikhil.mehta@noaa.gov	59 min
59	Raine, Karen	karen.raine@noaa.gov	152 min
58	Gerhart, Susan	susan.gerhart@noaa.gov	51 min
57	Wynn, Chris	chris.wynn@myfwc.com	16 min
55	holland, jack	jack.holland@ncdenr.gov	28 min
50	meyers, steve	steve.meyers@noaa.gov	152 min
47	burton, michael	michael.burton@noaa.gov	69 min
46	E, A	annemarie.eich@noaa.gov	48 min
42	Moss, David	david@smoss.com	93 min
42	Bademan, Martha	martha.bademan@myfwc.com	109 min
40	Swatzel, Tom	tom@sustainablefishing.or…	120 min
37	Cairns, Kalani	kalani1@bellsouth.net	126 min
36	Miller, Savannah	sgmill3@emory.edu	49 min
36	merrifield, jeanna…	jeannam@wildoceanmarket.c…	152 min
35	DeVictor, Rick	rick.devictor@noaa.gov	70 min
32	Bresnen, Anthony	anthony.bresnen@myfwc.com…	91 min
31	Takade-Heumacher, …	htakade@edf.org	152 min
30	Byrd, Julia	julia.byrd@safmc.net	152 min
30	Helies, Frank	fchelies@verizon.net	91 min
29	c, m	mec181@yahoo.com	150 min
29	Newman, David	dnewman@nrdc.org	92 min
28	blough, heather	heather.blough@noaa.gov	58 min
27	Knowlton, Kathy	kathy.knowlton@gadnr.org	77 min
27	Baker, Scott	bakers@uncw.edu	100 min
25	sandorf, scott	scott.sandorf@noaa.gov	66 min
24	Sedberry, George	george.sedberry@noaa.gov	4 min
24	Denit, Kelly	kelly.denit@noaa.gov	27 min

21	Fey, Kasey	info@keyskeeper.org	5 min
80	L, I	captaindrifter@bellsouth.…	247 min
78	Bademan, Martha	martha.bademan@myfwc.com	209 min
76	Morgan, Jerry	b8ntackle@aol.com	165 min
74	Moss, David	david@smoss.com	108 min
64	Fey, Kasey	info@keyskeeper.org	27 min
64	Cairns, Kalani	kalani1@bellsouth.net	1 min
49	Raine, Karen	karen.raine@noaa.gov	102 min
48	holiman, stephen	stephen.holiman@noaa.gov	124 min
46	Mehta, Nikhil	nikhil.mehta@noaa.gov	103 min
40	blough, heather	heather.blough@noaa.gov	92 min
39	meyers, steve	steve.meyers@noaa.gov	62 min
37	DeVictor, Rick	rick.devictor@noaa.gov	87 min
34	Knowlton, Kathy	kathy.knowlton@gadnr.org	3 min
34	E, A	annemarie.eich@noaa.gov	124 min
33	malinowski, rich	rich.malinowski@noaa.gov	28 min
31	Gore, Karla	karla.gore@noaa.gov	38 min
31	Michie, Kate	kate.michie@noaa.gov	96 min
29	Baker, Scott	bakers@uncw.edu	80 min
29	Dale, David	david.dale@noaa.gov	86 min
29	Denit, Kelly	kelly.denit@noaa.gov	16 min
28	Bresnen, Anthony	anthony.bresnen@myfwc.com…	85 min
28	Lloyd, Vic	vic_lloyd@bellsouth.net	50 min
28	Herndon, Andrew	andrew.herndon@noaa.gov	85 min
27	Helies, Frank	fchelies@verizon.net	77 min
27	Package-Ward, Chri…	christina.package-ward@no…	23 min
27	Tsao, Fan	fan.tsao@noaa.gov	54 min
26	c, m	mec181@yahoo.com	127 min

26	Byrd, Julia	julia.byrd@safmc.net	69 min
24	burton, michael	michael.burton@noaa.gov	75 min
24	merrifield, jeanna…	jeannam@wildoceanmarket.c…	94 min
24	sandorf, scott	scott.sandorf@noaa.gov	38 min
22	Takade-Heumacher, …	htakade@edf.org	37 min