

SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE

**Renaissance Orlando Hotel Airport
Orlando, FL**

June 8-10, 2008

SUMMARY MINUTES

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The Scientific and Statistical Committee of the South Atlantic Fishery Management Council convened in the Normandy Room of the Renaissance Orlando Hotel Airport, Orlando, Florida, Sunday afternoon, June 8, 2008, and was called to order at 3:00 o'clock p.m. by Chairman Carolyn Belcher.

Ms. Belcher: I'd like to welcome to the June Scientific and Statistical Committee meeting. We're going to start off first by Chairman Geiger is going to talk to the group.

Mr. Geiger: Thank you, Madam Chairman. I would just like to take an opportunity for to welcome everyone, especially those who were not at our orientation that we held a couple of months ago back in Charleston. We really excited about our newly constituted SSC. We're excited about the work that you've got to do. We appreciate sincerely everyone volunteering and stepping up.

We were just out west, and they were amazed at the quality of the people that we have on our SSC. I have spoken individually with members of this SSC who are extremely pleased with the quality of our SSC members. As the council, I can tell you we are equally excited and we look forward to great things. So, again, thank you very much for agreeing to serve and do good work this week. Thank you, Carolyn.

Ms. Belcher: Thank you, George. What we're going to do now is we're going to go around the table and do voice identification. I am going to go ahead and start down at Gregg's end of the table.

Mr. Waugh: Gregg Waugh, South Atlantic Council staff.

Mr. Pugliese: Roger Pugliese, South Atlantic Council staff.

Ms. Burgess: Christine Burgess, North Carolina Division of Marine Fisheries.

Mr. Chester: Alex Chester, recently retired from the Southeast Fishery Science Center.

Dr. Crosson: Scott Crosson, Marine Fisheries, North Carolina.

Dr. Buckel: Jeff Buckel, NC State University.

Dr. Cooper: Andy Cooper, Simon Fraser University.

Mr. Carmichael: John Carmichael, South Atlantic Council staff.

Dr. Barbieri: Luiz Barbieri, Florida Fish and Wildlife Commission.

Ms. Belcher: Carolyn Belcher, Georgia Department of Natural Resources.

Dr. Stephens: Andi Stephens, council staff.

Dr. Jiao: Yan Jiao, Virginia Tech University.

Ms. Lange: Anne Lange, marine fisheries consultant, formerly with NMFS.

Dr. Larkin: Sherry Larkin, University of Florida.

Dr. Pollock: Ken Pollock, NC State University.

Dr. Williams: Eric Williams, National Marine Fisheries Service, Beaufort, North Carolina.

Dr. Reichert: Marcel Reichert, South Carolina Department of Natural Resources.

Dr. Whitehead: John Whitehead, Appalachian State University.

Ms. Belcher: The first item on the agenda is going to be the adoption of the agenda. Does anybody have any corrections or changes they'd like to see made at this point to the agenda? Seeing none, then I'm going to go ahead and vote in that we accept the agenda as it is.

The next item is the approval of the December 2007 minutes. Are there any comments or changes that need to be made relative to the minutes from the December meeting? Any objections to the minutes as they are currently written? Seeing none, I'll go ahead and accept that they go forward as written.

Completion of non-disclosure forms; I'm assuming that means not everybody has submitted or given John or council staff copies of their disclosures. Again, I'm assuming that's just a request from staff to make sure that you have filled out those forms and handed them in.

Our first item of major business is going to be the SEDAR 16 observer and reviewer. We need to nominate an SSC observer and we need to identify an independent reviewer. I had talked with Anne Lange at the beginning of the meeting and she has offered to be our observer for this upcoming SEDAR. Is that correct, Anne?

Ms. Lange: Yes.

Ms. Belcher: So we need an independent reviewer for this process. Do I get to volunteer people?

Mr. Carmichael: It could be an SSC member but it doesn't have to be an SSC member. If the SSC believes someone is appropriate, they should recommend that name for consideration by the council; or it could be an SSC member. If I recall, it needs to be someone independent, who has not taken a role in the data, assessment or review workshops for this particular assessment.

Ms. Belcher: So that would mean you would only be responsible for attending the review workshop, correct, or would you actually have to attend all three?

Mr. Carmichael: No, you would only be responsible for attending the review workshop. I believe Douglas Gregory has been tapped to do that on behalf of his role at the Gulf of Mexico SSC, so we'll have Doug Gregory there. He's a crossover on both, but technically he's being appointed by the Gulf Council, so the South Atlantic has the option of appointing someone if someone here is willing to do it or you know of someone who you think would be good, they'd appreciate the feedback.

Dr. Cooper: What are the dates for the assessment review meeting?

Ms. Belcher: The review will be August 4th through 8th in Jacksonville. Think on it and let's try to have a name before the end of the meeting this week. We can bring it up if anybody comes up with someone or feels like they want to go ahead and participate. Okay, SEDAR 18 schedule and participants. Dale is not here but I was told that Julie would be willing to step in to help field the questions.

Dr. Neer: I can try. I believe what Dale needed from the panel was basically he just wanted to make you aware of the schedule for 18. It is red drum; it is a joint assessment. The Gulf of Mexico is being the lead on it. The South Atlantic portion is being done by ASMFC. The Southeast Fishery Science Center is doing the Gulf portion. He wanted you to look at the schedule, the terms of reference, and I believe he had preliminary list of participants, and see if you had any comments, additional things you'd like to see done or additional participants that aren't on that list yet.

Mr. Carmichael: Technically the SSCs role at this point in the SEDAR assessment is to preliminarily approve the schedule, say that you agree with the dates and discuss who you might like to participate and to suggest any people you think should participate based on their expertise, knowledge or experience. In this case this is a joint operation with the Atlantic States Marine Fisheries Commission.

It's kind of new territory for us. ASMFC's technical committee will be taking the lead in conducting the analysis. As most of you are aware, management of this in the Atlantic is going to be handed over to the states at some point, presumably in the near future, so that puts us in kind of a gray area with respect to the role of the SSC. If the management handover goes through, then this assessment won't be coming back to this SSC for consideration and approval and management regulations by the council.

It's really a courtesy at this point to show you where we stand on this and to ask if you'd like to weigh in on it. I think you may just wish to defer to the ASMFC for establishing the schedule and participation and indicate at this point whether or not anyone would like to sit on any of the workshops as a representative of the SSC.

Mr. Waugh: Just following up on John's comments, the task we have that we need the SSC to participate in is huge in of itself. Speaking as a council staff person, we know of no reason this transfer to ASMFC should not go through. Speaking as a council staff person, we would much

rather see your time devoted to our species and not spend any time on this. ASFMC technical folks have lots of individuals that can serve that role.

Ms. Belcher: Is there any further comment or do we wish to just go ahead and let this defer over to the commission at a later time? I just need to get it on the record whether we should defer or –

Dr. Barbieri: We should defer to the Atlantic States Commission.

Ms. Belcher: Thank you, Luiz. Okay, the next item – and is going to be back to Julie again – is SEDAR 19. We will discuss the schedule and participants for this upcoming SEDAR.

Dr. Neer: Okay, the same issue except different species. SEDAR 19 is going to be two species. It's going to be hogfish, which is joint between the South Atlantic and the Gulf of Mexico, as well as white grunt, which is South Atlantic only. Currently the state of Florida is going to be taking the lead on the hogfish assessment, and the Beaufort Lab from the South Fishery Science Center is going to be taking the lead on the white grunt assessment.

This SEDAR starts in May of 2009 and finishes in January of 2010. What you have before are draft terms of reference, a suggested schedule, as well as I believe you participants. The same question; if I'm missing anyone or if you have any serious issues with the schedule, we are ultimately going to need SSC representatives for this particular assessment as well, so if you want to volunteer now, you can.

The Gulf Council got these dates and terms of reference last week, chose to approve the schedule, but punt on the terms on reference because their SSC hadn't had a chance to review it yet. They're a fairly standard suite, but if you see anything additionally that you'd like to be changed, let us know. We have a little bit of time. This is also being brought to you essentially as a courtesy because the schedule and terms of reference will be finalized before you guys meet again in December.

Ms. Belcher: Okay, so with that, I'm open up the discussion for everyone. Has everyone had a chance to look over the terms of reference and are there any issues or exceptions to what is on the list, anything that should be added or you feel that should be added that isn't currently addressed? Additionally, too, if anyone is interested, we'll go ahead and get them on the record as well as being participants for Julie.

Dr. Barbieri: Julie, is this, too, on schedule to be conducted by Florida, right?

Dr. Neer: Hogfish, yes.

Dr. Barbieri: Yes, the hogfish portion. Then I'll volunteer to be the SSC observer for SEDAR 19.

Ms. Belcher: Any other comments or suggestions? Again, no comments as far as the terms of reference so that Julie at least has our unspoken endorsement if nobody has any objections to it, and they can move forward on that? Okay.

Mr. Carmichael: Julie, is that everything that you need? Is one person going to do it for you?

Dr. Neer: Well, I want to be clear. Luiz, are you planning on participating in data and assessment and then being the observer at the review workshop; was that your indication?

Dr. Barbieri: Yes.

Dr. Neer: I think that would be okay. Certainly, a second person would be nice considering we do have two species, and the SSC is going to be asked to review both assessments and accept both assessments. Luiz is probably going to be integral to the hogfish assessment and be able to report back to you. We may want to get someone who is going to be responsible for white grunt to be a separate thing.

The reality is we're actually going to have two assessments running, we're going to need two reports running. Christine is working on king mackerel now and knows what a beast it can be. We are going to need a second SSC person to do white grunt so think about that. I will draft someone like I drafted Christine.

Ms. Lange: I have a question relative to what that would mean. Is it just participating at each of the workshops as an observer and also the review?

Dr. Neer: Well, what you could do is actually participate in data and assessment. If you're the SSC representative at the assessment, that means you're the lead editor for the proceedings section of the report. It doesn't mean you write the whole report; you're the editor of the report helping with the rest of the panel's assistance, and then you attend as an observer at the review workshop. That way we have the continuity. You have been at all three workshops and so you can sort of help take the lead in presenting the assessment back to the SSC when it shows up at the end when it ultimately comes for your approval and whether it should be used for management.

Ms. Lange: I would be willing to do that for the white grunt portion.

Ms. Belcher: So we have Anne down for white grunt as an observer for the early two phases. Moving right along, the next item on the agenda is the Fishery Ecosystem Plan and Comprehensive Amendment, and we're supposed to be getting a status update from Roger Pugliese.

Mr. Pugliese: Okay, good afternoon, everyone. I want to go ahead and start up and build on the initial summary we had at the orientation meeting and coming off of public hearings and update everybody on the Fishery Ecosystem Plan and Comprehensive Amendment. The Fishery Ecosystem Plan, what we'd like to be able to get is provide some guidance on completion of this

document, as well as any ideas on future ecosystem research modeling and management. We have a short period of time, but at least some of the focus that we can have by the SSC would be well spent on that.

On the Comprehensive Ecosystem Amendment, acknowledge some of the extent of the science that supports our management actions and information that's providing the foundation for the amendment that's moving forward.

The Fishery Ecosystem Plan basically provides the biological, social and economic characteristics of the South Atlantic Ecosystem, updates our essential habitat information and serves as the source document for the present comprehensive amendment, as well as all the future comprehensive amendments. The comprehensive amendment is the vehicle that the council is going to use to move toward ecosystem-based management.

Essentially the intent of this – while limited in the scope right now and what is moving forward, the intent is that the council move to a system where we have one comprehensive ecosystem amendment done annually to cover all management actions the council is going to be working on. Therefore, it provides the council with a mechanism to fully review and evaluate actions and implement them for one fishery management plan or across multiple plans.

The present Comprehensive Ecosystem Amendment has a focus – it's management area is really to look at establishment of these new deep water coral HAPCs and at the same time looking at a balance with some of the traditional fisheries, deep water shrimp as well as the golden crab and understanding recreational fishers operating within those areas.

In addition, it addresses some of the essential fish habitat mandates; mainly to identify spatial presentations of the information on EFH as well as updating a lot of the information, detailed information supporting our EFH designations. Very specifically, the spatial designations are now presented through our Habitat and Ecosystem Internet Map Server, virtually all our habitat areas of particular concern and hopefully many of the essential fish habitat areas, so we have those up and operational and we will be refining those as we go through this process.

That moves us to the Comprehensive Ecosystem Amendment and was brought to public hearing; essentially the council brought five different components of the habitat areas of particular concern. Cape Lookout, Cape Fear, Stetson, Miami Terrace HAPC, Pourtales and the Blake Ridge, Methane Seep are the five areas under consideration with regulations looking at minimizing the impact or eliminate the impact of gear on these habitats, including prohibitions on use of longline trawls, including both mid-water and bottom trawls, dredge pots and traps; also, the use of anchors, anchor chains, grapples.

Possession of any of the species in the Coral Plan would be reaffirmed as not being allowed, as well as if any of the fishermen would be fishing for golden crab in allowable areas that will be discussed under one of the other management alternatives, that they would have to have an approved vessel monitoring system.

The other one would actually establish these areas that were identified. Three areas were brought forward that were developed by the Golden Crab Advisory Panel. The fishery is prosecuted in a zoned area, vessels fishing north of 20 degrees north latitude; vessels fishing between 28 and 25 and then south of 25, and there were three proposals that were brought forward to public hearing identifying those locations.

In addition, dealing with the deep water shrimp and really this royal red shrimp fishery, which is the only species that is caught in deep water areas, the area in North Florida just above Miami Terrace is where the fishery operates from vessel monitoring information that we have been provided, as well as affirmation or recognition from the industry itself of the validation of that vessel monitoring information.

Proposing possible movements of the western line of the coral area of particular concern, this Miami/Stetson Area, either six miles, six plus a little bit more to capture all the vessel monitoring points; 11 miles or 12 miles to the east; those are the ones that were brought public hearings to specifically address the management action for the establishment of the coral areas of particular concern.

As I mentioned earlier, one of the other regulations that is being proposed is to amend the Golden Crab Fishery Management Plan to require vessel monitoring, and we had a number of alternatives either to require for vessels fishing in these specific areas where I had identified earlier that may be proposed as allowable gear areas across the entire fishery or to look at the possibility of something else such as an acoustic monitoring.

One thing that's come up, as we move forward with the information on acoustic monitoring, the platforms necessary to accomplish that I think is going to be significantly expanded to look at things such as operations of pingers or other activities. That brings us to the public hearings that were held and the actions written and comments made during public hearing sessions.

One of the more significant action actions was the actual establishment of the allowable gear areas for the golden crab fishery. The Golden Crab Advisory Panel provided recommendations, a couple different tiers of recommendations. The first was to recommend that the council combine efforts to redraw the areas, look at – and specifically this is the first written acknowledgement that they are requesting we require VMS in the fishery.

However, they say that payment be made up front by the National Marine Fisheries Service and they be responsible for the monitoring charges, but then to continue this investigation of other technologies such as acoustic. One other point is to allow some type of break-in period. They're recommending a year as the VMS system goes on line. In addition to look and explore in cooperative research, possibly working to integrate logbooks, vessel monitoring and other data to characterize habitat, to refine fishing operations.

This brings us actually to the management areas that they have been recommending. They identified the areas earlier on. These are the two main proposals. They're tiered to look at two different things; one, traditional fishing areas and expansion into new areas. We'll move directly

to the proposals. The black areas in here are the original proposals. It's been expanded to cover an area here as the traditional fishing area in the northern zone.

This is north of 28 degrees north latitude. It also includes an area that is all outside of this bound, all the way up through here, as well as through here. That's the northern zone proposal under the first alternative of the revised area. What we do have here, as I also indicated, is habitat information, some of the more detailed pinnacle distribution information from a more recent ESDIM. It was similar to SEAPMAP bottom mapping information. That's with this area mostly up in here from Pete Pompano's maps that were provided, as well as any diver multi-beam mapping, et cetera, and the council is going to be looking at these in context and evaluating the proposals relative to the habitat distributions.

Moving to the other two zones, I mentioned the middle zone, which is south of 28 degrees; the original proposal is in green, and pretty much in the middle zone they stayed fairly close. However, they shifted in the recommendation this line here further to the east. The council is going to have to look very closely at that because, as you can see, these large circles actually are showing pinnacle centers and then the distribution of habitats relative to those pinnacles.

That may be an issue that we have to address in terms of refining those recommendations. In addition, the southern zone, which is essentially the Pourtales Terrace, the proposal there is a small diamond area in the base of this. What has happened, though, is that they've also moved their recommendations further to shallower water; and, again, these are pinnacle systems that are here, and again the council is going to have to balance what is needed relative to the proposals that are on the table.

The last proposal by the golden crab, they actually addressed the issue of fishing where either vessels that had been permitted earlier or other individuals may want to fish; these areas have no traditional fishing associated with them. What it did is expanded to include this entire area on the east of this proposal. It included an area that's basically north of here, a large area to the north, as well as another area on this large Miami Stetson Habitat Area of Particular Concern.

Again, the council is going to have to deliberate on this. There is a lot of habitat information and distribution information relative to these non-traditional areas. Moving on to the other action addressing the issue of royal red fishing in or near the habitat area of particular concern and readdressing the issue of this habitat area of particular concern, once we had acquired this detailed vessel monitoring system information, we re-positioned – the distribution of deep water coral habitat ecosystem in this entire area here has been identified with the main bound about 400 meters as the beginning of that habitat distribution.

We were able to use the high resolution bathymetry and reproject this entire bound; and once we did and had the vessel monitoring information, we had the National Marine Fisheries Service do an analysis of the area, and it was shown that in the area where the fishery does operate, which the individuals from the industry did acknowledge this in the development of the information for the VMS, as well as in public hearing we had individuals from the industry verify that this

information does represent the breaks in the area are very distinct and the fishery operates in this area.

In what are identified as royal red shrimp fishing areas or fishing points where royal red shrimp fishing occurred, out of the 7,431 points that had been identified from vessel monitoring from 2003 to 2007, there were only 69 points that occurred; however, most of them occurred in the southern zone area. In the HAPC, as you hit this point here, the area of particular concern actually jumps to 300 meters to capture the characteristics of the Miami Terrace.

The fishery operates north of that area. However, right north of this area there is some distribution of those points that were identified. The habitat distribution information has some very distinct areas that have been identified along that zone that are significant habitats that, again, the council has to look at.

As one of the public comments from the Southeast Shrimp Alliance, they specifically recommended the possibility of looking at a one-mile or so buffer area or one-mile area to address some of the distribution of fishing effort within the area; so, looking along this line, a possible one-mile area to compensate not only for the fishing operations, but there was concern over vessels breaking down of haul-backs or different situation where there may be issues where they were coming very close the line and moving over to it.

This, again, needs to be balanced by the council with regard to the available habitat information we have on this area. That brings us essentially to the timeline that we have. We've come to the first round of public hearings. We're doing this with a two-round public hearing process to be able to bring the alternatives developed by the advisory panels, all the coral habitat as well as the royal red and deep water shrimp advisory panels, as well as golden crab to this last round of public hearings and allow the council the opportunity to review these public comments and develop alternatives so we can do a more complete Comprehensive Ecosystem Amendment; finalize the Ecosystem Plan and bring it back out to out public hearing in October of this year with the intent to submit in December of 2008.

If you haven't seen this before, this is a continually expanding slide; that the bottom line with this entire process of not only a comprehensive amendment, but the fishery ecosystem plan, the only way this is being accomplished is through our cooperation and collaboration of partnerships, and that's really moving us towards this next level of ecosystem management in the region. With that, Madam Chairman, that is the update and the status report where we are in the process of developing the ecosystem plan and amendment.

Ms. Belcher: Okay, anyone have questions for Roger?

Mr. Chester: Roger, thank you very much. There is some verbiage in the discussion of the original golden crab proposal that I wonder if you could comment on, and that is that it talks about the golden crab fishermen working in areas of traditional fishing areas that do not impact deep water corals, and yet those are within the HAPC, and I wonder if you could elaborate.

Mr. Pugliese: Yes, what we have done is we have worked with the industry to get them to actually provide – and I should have pointed out in some of those images what they're calling trawl line sets of traps were provided to the council. They're fishing traditionally on mud, sand, shell hash and possibly rubble edges in these different zones. Essentially, all the sets are north to south.

What has been acknowledged not only by the fishermen but by actually our Habitat and Coral Advisory Panels is that to the greatest degree possible the intent is that allow some of those vessels to fish in those areas which are going to capture those types of non-coral habitats, but make sure that they are away from any of the other habitat distribution that we know of within those regions.

In the original proposals, if you look at some of the areas, it does show a very distinct area of the fishing operation's areas, so the intent is that – and as it was brought to public hearing – to capture traditional areas but not where anything may be impacting coral. It is based on habitat information as well as fishing operations. Of course, if we had the perfect mapping information, then we could absolutely pin this down to even more refined areas.

I think that's really the intent of doing, say, maybe cooperative research or something. The best thing is the fact that the industry is a small group. It's been going on for a fairly long period of time, so for them not to lose the gear and all that, most of those areas have been – especially the high-relief areas have been avoided by the industry. Hopefully, in capturing some of these allowable gear areas, we're going to be able to focus the fishing away from any of the habitat.

That's the intent and that's how we've built it to this point. Again, I would reiterate that if we had more detailed mapping beyond that, but in this case we have some – actually, we've got some very high-resolution multi-beam mapping, we've got a number of pieces that we'll be able to refine some of the areas that have been provided.

Ms. Belcher: Any other questions for Roger? Okay, let's go ahead up the floor for any discussion. Anybody have any comments or concerns or any guidance that they can offer to Roger. This is our second look at this draft, and we'll have one more look at it in December before it goes off for its final submission. Gregg.

Mr. Waugh: Just in terms of that second look at it, the council will be finalizing it for approval to the Secretary at the December meeting; so if there is anything that you all want to offer now that we would have a reasonable chance to address, now is the time to do that.

Ms. Belcher: Any further comment? Sherry.

Dr. Larkin: One of the documents I'm looking at is Volume 3 that addresses the human impact. There are some sections that still say "still need to be added" in the public draft.

Mr. Pugliese: Yes, that's all going to be finalized prior to the document – this is going to be cleaned up and brought back to the council for approval for public hearing in September. The

intent is that anything and any of the other holes that existing will be filled and expanded, if needed, or dropped out if the information does not exist. Some of those last points were identified as hopes to get in, and we're working with as much information as we can.

Again, this is going to be a living document, but where we can get guidance on, even structure, and how to allow this to evolve even past where we are, I think that's going to help finalize this document. So, yes, any of those types of things will be addressed.

Mr. Waugh: Sherry, if there are some specific items that you know of that could be plugged in there, any sort of help in that area would be greatly appreciated just to point us in the right direction.

Ms. Belcher: Any other questions or comments? Could I put forth a request, then, on behalf of the socio-economic folks, especially since Sherry brought it up, that Sherry at least be on the list to be able to see the draft in September. Obviously, we won't be looking at it until December; and if that's when finally reviewed by the council, anything that she would have to offer up as a suggestion.

Anyone else, again, on the committee right now that would be interested – Scott, if that's of interest to you – just make sure that we bring it to Gregg or Roger's attention so that you all can look at it in September. Any further comments? Okay, seeing no one with further comments, we'll go ahead and move on to the next agenda item, which is Shrimp Amendment 7. We're going to get a status update from Myra Brouwer and then Mike Travis is going to give us an economic analysis.

Ms. Brouwer: Okay, my name is Myra Brouwer; I'm council staff; and I will be giving you an update on what the Shrimp Review Panel discussed regarding the status of pink shrimp stocks in the South Atlantic. First, a little bit of background; Amendment 6 to Shrimp FMP established a proxy for minimum stock size threshold as a parent stock size capable of producing MSY the following the year.

The stock seems to be, again, below the MSST in 2008, and so the council back in March requested that the Shrimp Review Panel provide guidance as to whether there are management actions necessary to address the overfished status of the pink shrimp stock. The panel met via conference call on April 24th of this year.

First the landings in North Carolina; there seems to be a marked decline in commercial landings since 2005. Effort, as indicated by the number of trips, shows a declining trend in 2005 through 2007 relative to previous years. This information is included in Table 1 of the Shrimp Review Panel Report, which you have in your briefing material if you'd like to reference that document while I go through it.

There also is a negative relationship between landings of white and pink shrimp, as indicated by fishery-dependent and fishery-independent data. The fishery-independent data is the Pamlico Sound Survey that the North Carolina Division of Marine Fisheries conducts. In Florida the

landings in '07 are the lowest since 2000. Again, effort as the number of trips showed a steep drop in '03; then recovered a little bit; and declined again in '07.

When you compare landings of pink and white shrimp, there is no trend in the area where the two species overlap, which is I believe north of Cape Canaveral. According to SEAMAP data, density of pink shrimp has been below the MSST threshold, which is 0.461 shrimp per hectare for the last five years. They looked at the relationship between densities of white and pink shrimp, and there seems to be a significant negative relationship, looking at data from 1990 through 2007. However, the R-squared for that relationship is pretty low.

The same was observed for pink and brown shrimp, a significant negative relationship, but the R-squared for that was higher. There seems to be some competition going on where evidently white and brown shrimp would have a competitive advantage over pinks. The Southeast Fishery Science Center has been predicting pink shrimp in North Carolina. The Beaufort Lab runs a model based on overwintering temperatures, and they've been doing this for about 20 years.

Lately the model has not been able to make accurate predictions, which suggests that overwintering temperatures are no longer a useful factor in determining pink shrimp harvest in North Carolina, so they're not going to be running that model anymore. Based on all this information, the Shrimp Review Panel concluded that the abundance of pink shrimp in the South Atlantic is being affected by factors other than fishing, and they recommend that the council take no action at this time. That concludes my report. Are there any questions?

Ms. Belcher: Okay, seeing no questions from the committee, last year basically what we had been asked to do – and it was kind of in between meetings – was any comments or concerns that we had relative to what the review panel has done, we were just supposed to comment on whether – again, any comments specific to what they had done or something that might actually help in the future in addressing this was what the request was for us.

I'm assuming again at this point in time – obviously, it's officially during a meeting instead of between meetings, which is what happened to us last year, so we'd like to, again, be on the record as far as anything that we feel either should be added to the report or we fine with the report as is and concur with their conclusions? Andy.

Dr. Cooper: I just have a question that is it because it's basically an annual species that abundance is down, it's not our fault so let's keep fishing them like we always have? We don't do that with other fisheries; right?

Ms. Brouwer: Well, I don't know that I am qualified to answer that question, so I'm going to defer to folks who have more expertise in shrimp management.

Dr. Cooper: What was the discussion at the review panel when they came up with –

Ms. Brouwer: Okay, well, basically they decided that based on the economic trends currently in the region and the fact that there seemed to be some competitive relationships among the

different penaeid populations, that it's likely that fishing is really not that big of a factor. Therefore, from the fishery standpoint there is nothing the council can do at this point. Again, as you mentioned since it's an annual crop, it's more difficult to put in place management measures for an annual species.

Ms. Belcher: Andy, I was in on the conference call and it was pretty much discussing a lot of the economics of the fishery because that fishery is really having a hard time with fuel prices and such right now. The fact was that most felt in the group that just economics of this fishery right now is probably going to keep those levels low enough.

Given the fact that they feel it's more environmentally driven, there is not a whole lot that management can do to correct for trying to bring the MSST levels up. I think that was where a lot of the – even with the past year's discussion, it was a lot of the economics and the fact that the trips themselves are coming down, we're not seeing an increase in effort. We're actually seeing a decrease in effort, and, obviously, those numbers are still low.

Dr. Reichert: Are there alternative models to predict the shrimp population since the temperature model doesn't work anymore?

Ms. Brouwer: I have limited knowledge of this, but I did talk to Dave Evans, who is the researcher who has been heading that for a while, and he didn't give me any indication that they were going to continue tweaking that model or going to resort to a different model, so I'm not sure at this point what they plan to do.

While I'm on, I've pulled out Table 1 from the Shrimp Review Panel Report which shows you the trends in landings and effort in North Carolina and Florida. You can see that since '05, at least in North Carolina, things have slowed down considerably. In Florida there seems to be no specific trend but certainly the landings have been reduced substantially from five or six years ago.

Mr. Waugh: Just to respond to part of what Andy said that gave me a little concern that we're just going to fish them as we have. You can see that landings are way down; trips are way down. I think in terms of overfishing there is a lot of debate about whether we should even be including overfishing/overfished definitions for annual crops. We have to; that's the law, so they're in there. But, certainly, you can see that the level of fishing is much reduced. Now, trying to figure out what is really driving it, that's a lot more than the council's responsibility to tease that out.

Dr. Cooper: Again, we've got so many documents I haven't read all of these thoroughly, but hopefully in some of these documents it has fairly well articulated that rationale. Personally, I think it's a bad precedent to just have it out there of the one line in the – what am I looking at now – shrimp report that basically says the population dynamics are out of our control; therefore, we don't suggest we do anything.

It makes me nervous when we start relying on economic factors outside of our control to manage fishing; that it's helpful that gas prices are up and possibly what is driving this, so we don't have

to put in regulatory measures, but I think we should be very clear that we're hopefully keeping an eye on things; because if whatever forces are bringing down the trips change, then essentially what we're relying on to control effort is no longer there.

I don't think it's a good precedent to kind of just cross our fingers and hope. As long as it's in there somewhere, because I'd be worried about precedence being set without clear articulated language as to why we're able to do this way for shrimp but other ways for other species.

Dr. Crosson: I think there was a slight increase – you notice that there is a slight increase in the trips and the landings over the past year or two. I think the prices bottomed out a couple of years ago and there has been a slight increase since then, but I think you're going to find out very quickly this summer that the huge increase in fuel prices is really cut back the shrimping dramatically. I'd be shocked if it didn't. These guys have been under pressure for the past few years, but this summer is going to be horrible for them. But I agree with you, it would be nice to have that rationale written into the document.

Ms. Burgess: I'd just like to point out that table that you just had up there; I don't know what the CPUEs prior to 2000, but they seem to be fairly consistent over the years. The CPUE doesn't seem to have decreased as the trips have.

Ms. Belcher: I think the other thing that's hard, too, is any kind of distributional shift, SEAMAP pretty much – I have limited knowledge, but I remember correctly, the stratification has pretty much stayed the same. It doesn't move inshore to like state waters or farther out, so if there is any kind of shift over in that distributional pattern, they may not necessarily be seeing a shift in distribution.

That's been some of the discussion, especially with the North Carolina data is that they're seeing that there is this displacement almost with pink shrimp and white shrimp, so whether it's distributional, that's the big thing, is it hasn't really been looked at, and that's what their feeling a lot of the tie was it's environmental but nobody has got the focused work yet to really say that it's truly environmental. There is just a lot of correlation that is kind of insinuating that, and SEAMAP won't get at that with the current design. Any further comment?

Ms. Burgess: I'd also like to point out that the Pamlico Sound Survey, pink shrimp are mostly found from Core Sound south, so the shrimping that goes on in Pamlico Sound, that's a very small part of the pink shrimp.

Dr. Travis: I just wanted to add on to what you were commenting – just to the comments that you said before that in this fishery, because it is an annual crop, you really do not see a very good relationship; in fact, not much of a relationship at all between effort and CPUE. In other words, effort is not what drives CPUE in this fishery.

Mr. Chester: Let me second what Mike said; typically in this fishery effort almost seems to be self-governing based on abundance so it's very difficult to use CPUE for that purpose. I would want to point out, as one of the original authors of the shrimp temperature model, this species

overwinters in estuaries and at least in the past has been very sensitive to the minimum temperatures that have been found there over the wintertime.

The fact that the model no longer works is really disconcerting because it implies that there are some other environmental issues going on that we really, I think, don't have very much of a handle on at all. That is really worrisome to me.

Ms. Burgess: Well, doesn't that model just predict harvest and not actually abundance, so it could be fuel prices and things like that that are confounding the model?

Mr. Chester: It's possible, Christine, but the degree of divergence from the model is so great that I think something else is going on, because I think those shrimp generally have been very high valued and fishermen have really sought the pink shrimp in North Carolina as being a real premium species that consumers have asked for in particular, so I'm surprised.

Mr. Waugh: Myra, during the review panel meetings, did the Center representatives indicate what efforts now are going to be undertaken to develop another model or look into these other environmental conditions?

Ms. Brouwer: No, there was no discussion about that.

Dr. Travis: Kind of echoing Alex's concern, I know that some of us had similar concerns because this same type of effort reduction and the causes for effort reduction we've seen the Gulf Shrimp Fishery, and we still do brown shrimp forecasts out of the Galveston Lab in the Gulf. That model still seems to be working fairly well; maybe not quite as accurately as in the past, so I don't want to speak on their behalf, but the model is still being used and it works fairly well. I would echo Alex's concern about what is going on with this pink shrimp fishery. I think it's just we do not have the information right now to gauge what is going on.

Ms. Belcher: Any further comments or suggestions for future consideration and future reports? Is everybody okay with our suggestions? Gregg.

Mr. Waugh: Well, is the SSC recommending that some effort be devoted to looking into these conditions or are you just sort of expressing some general concerns and willing to leave it at that?

Ms. Belcher: Anyone care to speak to that? I was kind of under the feeling that we were just kind of – just like we had done last year, just providing some additional consideration and guidance; and, again, like Andy has expressed a concern just for a little bit more clarification so it doesn't sound like because it's not fishing, we're choosing not to do anything. It's work that does definitely need to be done and it would be nice to see it done, but the undertaking is the question.

Dr. Cooper: Well, just to that point, also since we're saying the fluctuations are due to environmental factors beyond our control; therefore, as the fishery management group we don't

need to worry too much about it, then simply understanding those fluctuations better won't necessarily – you know, it turns out not minimum temperature; and now it's full into the year, who knows what – either way it's a fluctuating annual crop whose dynamics are far more dedicated by things that we don't control, so what is going to move us to management with a species like that; I don't know. It's something for us to think about long term.

Ms. Belcher: Any other comment? I think this just, again, gets back to Gregg's point about the fact of whether or not annual species should be under this management guidance. Again, this has been brought up in general conversation for many years whether or not they should actually be underneath this overfished definition or not. Okay, any other comments or questions? With that, we'll move on to the other part of Myra's presentation.

Ms. Brouwer: Okay, what I'm going to do now is briefly walk you through the various actions and alternatives in Shrimp Amendment 7, and I will go through it fairly quickly. Then Dr. Mike Travis is going to get into the more nitty-gritty economic analyses that are being done for this amendment.

Again, I'd like to start with some background. Shrimp Amendment 1 was the one that added rock shrimp to the fishery management unit. A federal rock shrimp permit was required effective November of 1996 to fish for rock shrimp in the EEZ. Amendment 1 also established a rock shrimp closed area, and that was to protect *Oculina* coral found off of Fort Pierce in the Canaveral area.

Shrimp Amendment 4 established rock shrimp OY as MSY in the South Atlantic EEZ, and that was at 6.8 million pounds, and the overfishing threshold as two standard deviations above mean landings for the period 1986 through 1994. Then Shrimp Amendment 5 established a limited access program for the rock shrimp fishery and an endorsement was required to fish for rock shrimp in the EEZ off Georgia and Florida.

The eligibility requirements to obtain this were to already possess a federal permit on or before December 31st, 2000; and, secondly, that landings be at least 15,000 pounds in one of four consecutive years from the time of issue of that endorsement. Those were the two requirements to obtain the endorsement. There was also a VMS requirement for the vessels with the limited access endorsement. This amendment also established vessel operator permits.

Shrimp Amendment 6 revised the status determination criteria for rock shrimp and lowered the MSY and OY to 4.9 million pounds based on landings from 1986 through 2000. It established overfishing at the rate leading to annual landings larger than two standard deviations about MSY for two consecutive years, and it established the overfished definition as parent stock size less than half of BMSY for two consecutive years.

This brings us to what the council is looking at doing for the current issues. Basically, there is a need to maintain the effort and infrastructure in this fishery in order for it to remain viable. There is concern that the makeup of the fishery could change under the current requirements. The potential loss of endorsements due to not meeting the landing requirement and/or confusion

over renewal requirements are also a concern, and the council intends to address this through this amendment.

Also, there is a lack of economic data for shrimp fisheries in the region, so another action pertains to that. The actions and alternatives are listed in the document summary of the draft amendment, which was also part of your briefing material. If you would like to follow along with me, it is Page 17 in the document. The PDF number is 18. This lists the alternatives along with the summary of the environmental consequences.

Amendment 7 includes five actions. Actions 1 through 4 are specific to the rock shrimp fishery, and Action 5, as I mentioned previously, applies to both rock and penaeid shrimp fisheries, and this is to be able to gather economic data on these fisheries. Action 1 deals with the landing requirement. Alternative 1 is no action, do not remove that landing requirement. Alternative 2, which the council has picked as their preferred, is to remove that 15,000 pound landing requirement. Alternative 3 is to reduce it to 7,500 pounds.

The impacts from this would be a 34 percent reduction in fishery participants if the requirement is maintained. There would be negative biological impacts under Alternatives 2 and 3 due to an increase in effort although this would be likely minimal. There would be the least amount of long-term administrative impacts under Alternative 2.

One thing to keep in mind that was not discussed in March, and one thing that we will bring up during the committee discussion for this amendment, is that at present there is no formal mechanism that exists by which the South Atlantic rock shrimp landings are compiled and reported to the permits office for the purpose of determining whether endorsement holders have met that 15,000 pound landing requirement. If the council decides to retain that requirement, this is something that is going to have to be addressed, and this, of course, would imply burdensome administrative impacts under this action.

Action 2 deals with the endorsements that were lost due to not meeting that 15,000 pound landing requirement. Alternative 1 is no action. Alternative 2 has been picked as their preferred by the council, and that is to reinstate all the endorsements that have been lost. Alternative 3 is to reinstate those endorsements lost to vessels landing at least 7,500 pounds. Impacts would be adverse biologically from Alternatives 2 and 3.

The most beneficial socio-economic effects and the most burdensome administrative effects would be under Alternative 2, which is the council's preferred. Action 3 addresses the endorsements that were lost due to failure to renew, so this is a little bit different. Shrimp Amendment 5 required a limited access rock shrimp permit, but the final rule required a limited access endorsement. First of all, there was confusion as to what the permit and what the endorsements were. The federal rock shrimp permit can be renewed at any time, but the endorsement is only renewable for one year after it becomes inactive.

After that it is non-renewable and basically it is lost to the fishery. Right now a number of endorsements are non-renewable, and some of those are linked to vessels that did actually land

15,000 pounds of rock shrimp. The alternatives for this action; Alternative 2 is the council's preferred. Alternative 1, of course, is no action. The preferred is a little bit lengthy, but the council members really wanted to be very specific with the wording of this alternative.

It is to reinstate all endorsements for those who renewed their permit in the year in which they failed to renew their endorsement. It was worded that way because they wanted to make sure that those folks who really intended to remain in the fishery were not going to be penalized. Evidently they had not understood the process well, and so the council members felt that they wanted to give those folks a chance to continue to participate in this fishery.

In addition, the alternative also states that rock shrimpers would be required to be eligible to have their endorsements reinstated, to apply for a limited access endorsement within one year after the effective date of the final rule for this amendment. On top of that they added a note that said that eligible individuals need to have had an endorsement at one time. So, again, council members wanted to just be doubly sure that this was going to be targeting folks that really intended to be participating in this fishery.

Then Alternative 3 was to extend the time allowed to renew the rock shrimp endorsement to one calendar year after the effective date for this action. The impacts are minimal, if any, from number two and number three; and, of course, the most beneficial socio-economic impacts and most burdensome administrative impacts are from Alternative 2, which is the council's preferred.

An issue that will be brought up for discussion at the committee level is that Alternative 2 right now refers to individuals; whereas, the endorsements are issued to vessels, so we're going to need to make sure that the council is aware of this and this gets clarified because it can be an important distinction when it comes to writing and implementing the regulations.

Action 4 addresses changing the names of the permit and the endorsement to minimize confusion. Alternative 1 is to not do anything about it; continue to use open access permit and limited access endorsement, which is very confusing. Alternative 2 is to create two types of permits for the rock shrimp fishery and specify that a vessel can only have one of the two.

Rock permits, South Atlantic EEZ, would allow fishing throughout the South Atlantic EEZ; and rock shrimp permit, Carolina Zone, would allow fishing in the EEZ off North and South Carolina only. No direct biological or economic effects from this action. It would really just pertain to administrative work. There would obviously be positive social effects, and that confusion would be minimized.

Finally, Action 5 is to require shrimp permit holders to provide economic data. Alternative 1 is no action. Alternative 2 is to require economic data collection from all South Atlantic permit holders. Alternative 3, which is the preferred, is to require all South Atlantic shrimp permit holders to provide economic data if selected to do so. No biological effects from this; beneficial economic impact and significant administrative burden from number two and number three. If you have any questions, I'd be happy to answer them.

Dr. Crosson: Myra, for Actions 2 and 3, what is the additional administrative effect that you have you listed? I mean, we have Alternative 1 as no action and not reinstating. Is that just because things expire; it doesn't cost any administrative effort to go out there and address the people that have already been lost?

Ms. Brouwer: Okay, so Action 2 is dealing with endorsements that are lost due to not meeting the landing requirement. Well, yes, reinstating all the endorsements that are lost, which is Alternative 2, would cause the permits office – and I'm going to let Mike jump in here for a second to explain exactly how this would be addressed, but it would create a burden in the sense that they would have to revamp their system and figure out a way to reinstate all these endorsements and notify the fishermen and clarify who is going to be allowed to fish under those endorsements. Let me let Mike pick up on that and explain.

Dr. Travis: I'll just explain a little bit. These endorsements could have been lost within the last six months. They could have been lost three years ago. It will be a burden to go back in to figure out, first of all, which permits and vessels these are and then potentially track down the current owners which may not have been the owners of the vessels at the time that the endorsement was lost; contact those people and then get these endorsements and all the paperwork filled out, and then get them reinstated. Right now those endorsements are not in the system. They have been basically kicked out.

Ms. Belcher: Anyone else have any questions?

Ms. Burgess: I have a question just for clarification. What is the difference between a permit and the endorsement?

Dr. Travis: The difference basically is that an endorsement is not a stand-alone document. You cannot have an endorsement without having a permit because the endorsement is an attachment. If you want to think of it in those terms, in layman's terms, an endorsement is an attachment to some other permit. You can't have the endorsement without having the permit.

Ms. Burgess: What does the endorsement allow you to do, fish in a particular area?

Dr. Travis: As it currently stands, the open access permit only allows you – it doesn't change the fishing privileges. The open access permit only allows you to fish in the EEZ off the Carolinas. The endorsement allows you to operate in the EEZ off of East Florida and Georgia.

Dr. Larkin: This more a general comment, but I know in the past those endorsements or permit files have been like living documents. You know, each year when they do that, they update them and don't keep the past. Is there any protocol for sort of recording permit ownership or endorsement ownership at a point in time so at some point in the future you can go back and solve that problem?

Dr. Travis: Yes, Carolyn Framic is the head of our permits office. She will be here, I believe, on Tuesday to address these types of issues in more detail, but the permit system probably, Sherry,

as you knew it to be no longer exists. That's the old R-base permit system. That has been kicked out and we now have the new and improved PIN system whereby we do a much better job of keeping track of all of that historical information, so we should be able to track that information down much more readily than we used to in the past.

Then, also, I wanted to add on with respect to Action 3, the administrative costs basically have to do with the fact that you would be eliminating the current endorsement attached to the permit system, and now we're going to have two completely separate permits whereby individuals would only have one permit or the other and they wouldn't have the endorsement as well as the permit. Again, it would require the permits office basically to revamp the system but then also to implement it and try to implement it in a way that's not going overly burden not only themselves but the fishermen and create more confusion than apparently what we've already had.

Mr. Waugh: And I would just point out – and, Mike, I'm sure you realize this – but the amendment that set this up originally called for a limited entry permit, so now we're coming back around and implementing what was to have been implemented initially. Let's be careful about the administrative burden.

Dr. Travis: Should we call that a postponed administrative burden?

Ms. Belcher: Any other general questions or comments? Seeing none, I guess we can go ahead and move on to the next part of this which is Mike's economic analysis.

Dr. Travis: Okay, I want to, first of all, explain that, yes, I do know how to count. I've had several people already ask me why are these numbers in this rather odd order and hopefully when I'm done with the presentation it will make sense. There is a rationale, I promise, as why I have not taken these exactly in the order – in fact, not all in the order of how the amendment is organized.

I also want to say at this point this is a preliminary analysis. The complete regulatory impact review and initial regulatory flexibility analysis is not done at this point. Of course, that will be done before the council potentially takes final action at their September meeting, so this should be viewed as a preliminary analysis at this point.

Let me talk about the data very quickly. The rock shrimp endorsement permit data was valid as of April 1st, 2008. Permit data pertaining to the open access rock shrimp permits and the South Atlantic penaeid shrimp permits; those were valid as of March 31st, 2008. The reason that there is a one-day variation there is because the status of permits – well, actually the endorsements changes at the first of each month with regard to whether they're active, renewable or non-renewable, so we thought it was critical to wait until the 1st of April to determine what the most current status of the endorsements is.

With respect to area landings, revenue and price information that is used in the amendment, that information came both from the Statistics and Technology Division at NMFS Headquarters and also from the Southeast Fishery Science Center in Miami. The aggregate information pertains to

the years 2003 to 2006. Aggregate 2007 information was not yet available when the information was compiled in early April. We're going to hopefully update that before the document is finalized before the September council meeting.

Landings and review information for all permitted vessels came from the Florida trip ticket data base as maintained by the Science Center; the Gulf Shrimp landings data base, the fisheries information systems maintained by the Gulf States Commission; the Atlantic Coastal Cooperative Statistics Program, which maintains trip ticket data for the states of Georgia, South Carolina and North Carolina, except actually I had to get North Carolina's 2007 data and South Carolina's 2006 and 2007 data directly from the states because that information had not been transmitted or transmitted completely to ACCSP.

Then the SAFIS data, which is basically the northeast region's data, I also maintained that from ACCSP for the years 2003 to 2007. Dealer-level information came from the cumulated landings system data base, Florida trip ticket data base and the Gulf Shrimp landings data base for 2003 to 2007. As some of you may know, the council had asked me to do a preliminary analysis before they move forward with this amendment.

This was done last August, and that analysis looked at information from 2003 to 2006. Then after the council reviewed that, they decided to move forward with Amendment 7. In the current analysis I did relook at that information for 2003 to 2006, but then, of course, added on the 2007 information that was available.

The reason I looked at both was to address edits to the data that had been made since last August, to look at information pertaining to dealer permits, which is something that we had not looked at before but which we found out was a rather important factor; changes in the composition of the permitted fleet, and, of course, we are now focusing on 2004 to 2007 as that's the most current four-year timeframe.

One of the things – I won't go into the details of this here but it's in the document – is that the results changed somewhat dramatically in shifting from the 2003 to 2006 to the 2004 to the 2007 time period. Okay, Action 5, as Myra said, this is an action to require permitted shrimp vessels to provide economic data. The reason I have this first is because I want folks to understand that most of the analysis that we do here, we're primarily looking at impacts to landings and revenues.

We do not currently have cost information and therefore we do not have profit information on the permitted vessels. This is rather unfortunate because several of our legal mandates, including executive order 12866, the Regulatory Flexibility Act and Magnuson-Stevens, tells us that this is one of the things that we should be looking at. In other words when we analyze the impacts of management actions, we should be looking at the impact to vessels' bottom lines. At this point we really cannot do that.

We use revenues as sort of a proxy and it's not the best proxy in the world, but it's the only proxy that we have and then to qualitatively assess what is probably going to happen to vessels'

profitability. I should also mention that under the reauthorized version of Magnuson, Magnuson specifically now states that we are supposed to specify all economic data within each FMP that is necessary to meet the requirements of Magnuson-Stevens, so this, again, is meant to meet that particular requirement.

The requirement in this case – and just to clarify, we currently do not have regulatory authority to mandate this data be submitted. General Counsel advised us of this some time back, saying that the current regulations do not allow us to require this information, which is exactly why we have this action in the amendment.

This particular action would – of the five actions, this one would apply to all South Atlantic shrimp-permitted vessels, which would mean all the endorsement holders, the open access rock shrimp permit holders, as well as the penaeid shrimp permit holders. At present there is approximately 700 vessels that would be covered by this requirement. There are many more permits than that, but there are many vessels that have two or potentially all three of the current permit/endorsements.

Now, we already have this type of a program set up in the Gulf Shrimp Fishery. We implemented that particular program in 2006, so we are already well into our second year for that program. This program in the South Atlantic would basically be merged with the current program to collect this kind of information in the Gulf. The reason that we want to do that is because there is considerable overlap in the vessels that participate in the Gulf and South Atlantic shrimp fisheries.

In fact, when I checked against the vessels that have Gulf shrimp permits, there are approximately 300 South Atlantic permitted shrimp vessels that also have Gulf vessels. Obviously, we do not want to double up the burden, and so it would be a joint program in order to not double the burden on these particular vessels.

The particular survey instrument that we have been using is a two-page mail survey. We feel like we have vetted that quite bit, and we're confident that this can be applied in the South Atlantic Fishery without much difficulty. In the Gulf we have been randomly sampling about 30 to 33 percent of the permitted fleet each year.

One of the things that we have already talked about is that in order to – and since this will be a joint program – in order to ensure that we get coverage for each fishery, in other words, not just the Gulf but also the rock shrimp and the penaeid shrimp fisheries in the South Atlantic, that we would need to stratify our samples in order to ensure sufficient coverage.

Okay, with this new requirement, there would be a new burden on approximately 400 vessels that are specifically unique to the South Atlantic shrimp fisheries. The survey takes about 45 minutes to complete. In terms of a specific burden, there is obviously no direct costs here, but there is an opportunity cost for the fisherman's time to complete it, and we are estimating that based on – the Bureau of Labor Statistics says that the approximate hourly wage for first-line supervisors in fisheries is about \$19.33 per hour.

Given that it takes about three-quarters of an hour fill it out, we figured that the opportunity costs or burden per vessel would be about \$14.50 on average. For example, if we required a census, the total burden to those 400 vessels would be estimated at about \$5,800 per year; or if we did approximately a 30 percent sample, the total opportunity costs would be estimated at approximately \$1,700 per year.

Now the other four actions specifically deal with the rock shrimp fishery. I wanted to provide some background information here that goes back to when the limited access program was implemented under Amendment 5. Amendment 5 estimated that there were going to be 167 permits/endorsements required under that amendment, and, in fact, what we ended up with was 155 rock shrimp limited access endorsements.

Now, in that amendment, in multiple locations, the council specified that their target for the fleet size in this fishery was 150 vessels. They felt that was, quote-unquote, optimal fleet size. Now at present, of those 155 endorsements, 105 of those are active, and I don't mean active in the sense that they're landings. I mean that they are active permits; in other words, the permits are up to date.

There are 105 active endorsements. There are 20 endorsements that are currently renewable. In other words, they have expired, but the vessel owners still have a year. They're still within their one-year timeframe to come in and renew those endorsements, and 30 endorsements have been terminated. In other words, they are not currently renewable under the existing regulations.

So, at present the maximum fleet size in this fishery has already been reduced to 125 vessels. We start off with 155; the council's target was 150; now we're down to 125. I wanted to point out – the information is in the document – that two of the last three years, 2005 and 2007, have been two of the worse years on record with regard to landings and revenue. Each year has been under half a million pounds, which is very low by historical standards.

Catch per trip; the number of vessels participating in effort in terms of number of trips has been very low as well in those two years. Prices; rock shrimp prices basically crashed and burned in 2004; remained low in 2005; somewhat recovered in 2006 and have continued to recover in 2007. That is the good news for the fishermen in the last couple of years. However, fuel prices have been increasing faster than rock shrimp prices have, particularly, as we all know, over recent months.

And I think as someone already commented, this may be a historical low in terms of effort in not just the rock shrimp fishery but the shrimp fishery in general as a result. One other thing is that these endorsements are fully transferable. In other words, you can, as a vessel owner, move this endorsement, transfer this endorsement to another vessel that you own or sell it to someone else for them to put their vessel.

As a result, that endorsement has some market value. In other words, you sell it to somebody else, they're going to pay you something for it. Now in the past, when we looked at this, the value of those endorsements was averaging about \$10,000 in those transactions.

More recent information suggests, as we would expect, the value of those endorsements has gone down, and this is simply a reflection of the deteriorating economic conditions in the fishery. In other words, as expected profitability goes down, the value of those endorsements is likewise going to go down, so right now I would say at best those endorsements are worth about \$5,000 apiece, and that may be a little generous.

All right, a little back of background on Actions 3 and 4; basically, the council's goal here with these Actions 1 through 4 is to increase the potential productive capacity of the fleet, which in turn would support the existing onshore infrastructure. As Gregg already pointed out, Amendment 5, in its text, discussed the implementation of a limited access permit in the rock shrimp fishery, but in the implementing regulations in fact what was put in place was a limited access endorsement.

As I commented earlier, the endorsement is attached to the open access permit. The open access permit is required in order for vessels to operate in the EEZ off of the Carolinas. If you're going to operate in the EEZ off of East Florida or Georgia, you need both the permit and the limited access endorsement. Now, on the application form – I can see where this would be a little bit confusing potentially for some owners – is that open access permits and limited access permits are separated on the application form itself.

It may have been the case that when vessels went to renew their permits and/or endorsements that they saw that open access section first and didn't bother to go down below to where the limited access portion is and may have made a mistake in the process. As Myra already noted, there is no time period attached to when vessels can renew their open access permits, but there is a time limit in terms of when they can renew their endorsements.

As we found, some of the endorsement holders renewed their open access permits but failed to renew their endorsements, and that has created a problem. In my view, Action 3 is a short-term solution to this problem of fishermen being confused with the application process while Action 4 is meant to deal with it on a long-term basis so that we don't have this occurring in future years.

Okay, so under Action 3, as Myra already said, we're looking at reinstating endorsements for a limited number of those that have been terminated. This would not reinstate all of the terminated endorsements. It would only reinstate those for those who were confused. Under Preferred Alternative 2, specifically it looks like there were five confused permit applicants. These are the five vessels that could potentially benefit from Preferred Alternative 2.

These particular five vessels are five of the most productive vessels in the fleet. They average about \$390,000 in gross revenues per year, so these vessels would retain or regain their ability to participate in the fishery and thus would still have the opportunity to get landings and

endorsements from the fishery. They would also retain the value of their endorsements, which, of course, at \$5,000 apiece, that would be \$25,000.

The short-term benefits to the fishery as a whole, obviously, would be minimal because these vessels in recent years have been primarily involved in the Gulf shrimp and particularly and the northeast sea scallop fishery, and their involvement in the rock shrimp fishery has been limited in the last couple of years. The benefits in the long term would potentially be greater because the maximum fleet size would increase from 125 vessels at present to 130 vessels.

Now the actual benefits are going to be dependent somewhat on what the council decides to do under Actions 1 and 2 since none of these five vessels who would benefit under Preferred Alternation 2 to Action 3 have actually met the current landings requirement. Alternative 3 would require multiple entities to take actions, including our permits office and the vessel owners, and it's not too clear what the effects or benefits would be because we don't know what the vessel owners are going to do under Alternative 3.

I do want to state that there was some concern when I did the analysis for this as to whether this particular action was targeting the proper group of vessels. This is because, as I said, these vessels have not been really involved in the fishery in recent years, and there were some other vessels who have been more active in the fishery in recent years, who also had their endorsements terminated.

However, those particular vessels that have been more active in the fishery in recent years and whose endorsements were terminated, they are no longer commercially active. I reviewed the last couple years of data and these vessels have vanished in effect from commercial fishing. And in fact, in checking with the coast guard data, three of these vessels that had been involved in the fishery are no longer even documented by the coast guard.

The point of this is that I think the council is targeting the right group of vessels in this case and that these vessels are productive and they are still currently engaged in commercial fishing, and, therefore, there is at least some chance that they will return to the rock shrimp fishery.

Okay, Action 4, this is changing the names of the permit/endorsement and the permit structure. One of the advantages of this particular action is that each vessel would only need one permit under Preferred Alternative 2 rather than for those who have the endorsements that need both the endorsement and the permit. This would simplify the permit application process for these particular vessel owners.

It would also reduce the application cost for the owners of the limited access vessels. It's a minimal benefit, quite frankly. Right now, as it currently stands, the application cost is \$25.00 for the first permit or endorsement that you apply for, and then we charge an additional \$10.00 for the second, third, fourth, et cetera permit or endorsements that is applied for. There is a minimal economic benefit to these particular vessels of \$10.00 per vessel; and for 130 vessels that's how we get the \$1,300 estimate.

The long-term benefit is really eliminating this confusion with the application process and eliminating any unintended termination of limited access vessels. With respect to Actions 2 and 1, some background information – it would be helpful if people have their copies of the amendment document, if you want to turn to Page 331 or bring it up on your screens, Table 3.4-6 has considerable critical information regarding the current status of these endorsements. You may want to take a look at that because I did reproduce it in this presentation.

Again, some background information, Amendment 5 implemented a 15,000 pound landing requirement. Basically, it's a use-it or lose-it requirement. In other words, in order to retain your endorsement the vessel would have to land at least 15,000 pounds of South Atlantic rock shrimp in at least one out of every four consecutive calendar years for everyone who has that limited access endorsement.

Now, keep in mind that at the time that Amendment 5 was being deliberated the rock shrimp fishery and shrimp fisheries in general were still economically healthy back in 2001 and 2002. Obviously, that is no longer the case. As I indicated before, two of the last three years have been two of the worse on record with regard to landings and revenues, and so that would give an indication that it's probably going to be difficult for these vessels to meet that landings requirement.

Another critical point that I wanted to point out is that according to General Counsel the four-year clock that applies to this particular requirement – and I know there has been some discussion within the council as to whether this is what they intended, but this was GC's determination is that the clock starts over whenever an endorsement is renewed. So, if you keep your endorsement, the same vessel has it, then your clock started when you first started.

If that endorsement is transferred, then the clock starts over; the four-year clock starts over, so the clock starts whenever you initially obtained your endorsement, which is why I looked at the 2003 to 2006 time period and now we're focusing on 2004 to 2007. As I said before, this particular requirement, when I looked at it this time, the effect of this requirement seemed to be much larger now looking at 2004 to 2007 than they were in looking at 2003 to 2006.

As I said, the initial year in which the vessel obtained the endorsement is critical because that determines when the clock begins. Another critical point that was not looked at in the preliminary analysis was the fact that dealers that purchase South Atlantic rock shrimp landings have to have a federal permit. This was instituted back in 1996, so it's been around for quite a while.

Unfortunately, we have found in our review of the data that in certain years there has been a fair amount – anywhere from 6 to 8 percent of the landings were being bought by non-federally permitted dealers. Obviously, that is not a good thing because it's not legal. As a result, those landings cannot be counted. If you sell your landings through a non-federally permitted dealer, those landings cannot be applied towards meeting the 15,000 pound requirement.

In effect, the landings did not happen. That, we found, would potentially affect and did potentially affect some of the vessels' ability to meet the 15,000 pound requirement. Keep in mind, too, that these landings have to come from South Atlantic waters. Landings from Gulf waters cannot be used to meet the requirement.

The landings information, as I said before, comes from state trip ticket data. As some of you probably know, using state trip tickets to determine where landings come from can be problematic for a variety of reasons; not the least of which is that typically they only record one area in which they fished, and some of these trips can go on for 30 to 40 days and they operate in multiple statistical areas.

It is also the case that the trip tickets are not filled out by the fishermen; they're filled out by the dealers. We found that the dealers sometimes were confused about what area the fisherman was fishing in, or they were confused about the water body codes that are supposed to be used to distinguish between Gulf and South Atlantic waters.

Now, we attempted in some cases to make use of the VMS data to make corrections to this information so that we had it as accurate as possible, but that was probably only a partial solution to the problem. Again, as I said, I think Action 2 should be considered as a short-term solution to the issue; whereas, Action 1 is a long-term solution.

Action 2, reinstating the limited access endorsements due to not meeting the 15,000 pound requirement, in this case the only vessels that we would be looking at here are the 83 vessels that initially obtained their endorsements in 2003, because they're the only ones whose four-year clock basically expired or ended at the end of 2007. Of those 83 vessels, what the landings data indicate is that 40 have met the 15,000 pound requirement. The other 43 have not.

What that would mean is that this year, based on that information, we would be forced to terminate, revoke, whatever term you want to use, the endorsements for those 43 vessels that have not met the 15,000 pound landings requirement. These vessels would lose their ability to participate in the fishery in the future, and they would lost the market value of those endorsements.

Again, these are highly productive vessels, averaging around \$300,000 per year in gross revenues. Now, granted, the recent dependence on the fishery has been very limited. Only about \$4,600 per year in the last few years has been coming from South Atlantic rock shrimp. The short-term benefit under Preferred Alternative 2 is not large – it's probably about \$200,000 – but the long-term benefit, by allowing these vessels to stay in the fishery, is probably going to be larger than that.

Now, Alternative 3; Alternative 3 is the 7,500 pound alternative, and we had thought that would allow a fair number of vessels to stay in the fishery, but in fact the 7,500 pound alternative is really not that different from the current 15,000 pound alternative. In other words, if we reduced the landings requirement from 15,000 pounds down to 7,500 pounds, it would only allow another

three or four vessels, depending on other actions, to remain in the fishery. There is really not much difference between 7,500 pound requirement and the current requirement, the status quo.

Under Alternative 1, or the status quo, the maximum fleet size would be reduced down to 82 vessels just this year. Under Alternative 3 the maximum fleet size would be reduced down to 85, possibly 86 vessels. Of course, under Preferred Alternative it would remain at least at 125 vessels, possibly 130 vessels, depending, again, on other actions.

Given the minor difference between Alternatives 1 and 3, Alternative 3 conveys only minimal short-term or long-term benefits beyond the status quo. The only significant long-term benefits to the fishery would be under Preferred Alternative 2. Similarly, the indirect benefits to dealers or the onshore infrastructure under Alternative 3 would only be minimally greater than Alternative 1 since there's only going to be three or four more additional vessels.

The only potentially significant indirect benefits would be under Preferred Alternative 2. Then Action 1; this is the action that would permanently change the landings requirement, the current 15,000 pound landings requirement. The data currently indicates that there are an additional 27 vessels that have not yet met the 15,000 pound requirement. In other words, these are vessels that have obtained their endorsements in 2004, and in more recent years these 27 vessels have not yet met that landings requirement and, in fact, may not meet the requirement based on the current condition of the fishery.

Again, these vessels are relatively productive, averaging about \$268,000 per year in gross revenues, but are not very dependent at all on the rock shrimp fishery. Less than a half percent of their total revenues per year have come from this fishery. Again, if they lose their endorsements, they would permanently lose their ability to participate in the fishery and they would lose the value of their endorsement.

Now, since these vessels could also lose their endorsements come next year or in subsequent years, the maximum fleet size could decrease to at least 55 vessels under Alternative 1; could decrease down to 58, possibly 59 vessels under Alternative 3; and, of course, would remain at 125 or possibly as high as 130 vessels under Preferred Alternative 2.

Alternative 3 conveys little long-term benefits beyond Alternative 1, the status quo; and, again, only Preferred Alternative 2 would convey any significant long-term benefits to the fishery, both the harvesting sector and the onshore sector. I want to emphasize that given the fishery's recent economic performance and the fact that this is a recurring requirement; in other words, the requirement doesn't just end at the end of 2007.

Every year this is going to be evaluated; and if you didn't meet this requirement in at least one year, every four years you're going to lose that endorsement; and what the two of the three years suggest is that the maximum fleet size could be reduced very quickly and very significantly in just a matter of a few years, so that the 155 that we started off with and the council's target of 150, we could be significantly below that in just a couple of years. This could have a very

severe effect on the fishery if the requirement stays as is. And I apologize for rambling too long, as I usually do. Any questions?

Ms. Belcher: Anybody have any questions for Mike? I have a few, and I'm directing them to both Myra and Mike because I'm not sure the data that's in the report, who is actually responsible for that entry. There were two tables that I tripped across that were looking at South Atlantic rock shrimp landings, and it's on Page 323 and 322. One has a citation for it, the other one doesn't, but there is a discrepancy in numbers which was explained well on Page 324.

My question is in particular with the year 2005. On Page 322 it has higher landings than on Page 323, which was explained that it's because that actually accounts through Gulf landed and South Atlantic. One actually only accounts for, I guess, the South Atlantic states and the other one actually encompasses any Gulf ports that actually landed South Atlantic rock shrimp. But, in 2005 that's actually a reversal. There is a lower number there and I'm kind of wondering what that would be attributed to. If you're saying that discrepancy is because the Gulf is in the one and it's not in this one, why is it the case?

Dr. Travis: The reason being is that can flip-flop. In some years it can be that rock shrimp coming from South Atlantic waters can be landed in the Gulf. Some of that can be landed in the Gulf, but it can also be the case that rock shrimp that came from Gulf waters can actually be landed on the South Atlantic side. It varies by year because these vessels, kind of going back to what I said before, they're migratory, a lot of them. They can switch from one side of Florida to the other side of Florida very easily.

Ms. Belcher: So what is the other source of data, then? If the one that's on Page 322 is coming from the National Marine Fisheries Service, Fisheries Statistics Division, Silver Spring and the Miami office; the other one doesn't have a citation; where is that data coming from that it would be that different?

Dr. Travis: Well, first of all, I want to keep in mind that 3.4-4, these are landings that actually occurred in South Atlantic states. In other words, the landings came into ports in East Florida, Georgia, South Carolina and North Carolina. 3.4-5 is specifically referring to landings that came from the South Atlantic waters, and it doesn't matter where they ended up being landed at. But the data sources – you're right, there is a potential slight difference because obviously if they're landed in the South Atlantic, they're landed in the South Atlantic, they would have to come from Florida, Georgia, South Carolina and North Carolina trip tickets.

Coming from South Atlantic waters, those landings, if they end up being landed at Gulf ports, they would be in the Gulf shrimp landings data base. So they're coming into, say, Fort Myers; Tampa; Bayou La Batre, Alabama; those would be the typical ports they would be coming into there.

Ms. Belcher: Yes, I just think just for clarification purposes, just because it's been so well-documented in another area, because there is no source of information, that conflict kind of left me with a hard time of how to resolve where that discrepancy was. I kind of understood, but

then when you see one particular year that doesn't behave like the general trend that's been explained on the next page, it's kind of, you know, how do I interpret that part of it.

Dr. Travis: Understood; we'll make that citation.

Ms. Belcher: The data relative to the size of the vessels and the horsepower of the vessels; I just have a question because with the minimum there are a few sizes of vessels that I'm really questioning how did they get into the fleet at 17 feet and 75 horsepower? Given where that fishery operates, I'm kind of confused how – with a 50-pound hold, I can't imagine that it's a very either safe trip or very economical trip.

Dr. Travis: Yes, that would be a bit dangerous; wouldn't it? I wouldn't advise it. In fact, I believe I made a notation, there is a footnote in there that talks about these particular – they're generally state-registered boats; they're not even coast guard documented, and none of them have been active; I mean, active in terms of landings.

This is a bit of speculation on my part that what I believe is happening here is that there are vessel owners that have these endorsements, and they need to put those endorsements – say, they may have lost one of their vessels, one of their larger vessels, and what they did was they transferred it on to another boat that they own, and they're kind of using those boats as a placeholder for their endorsements until they can get them on to a larger vessel that's actually going to make use of the endorsement.

Again, it's speculation but all of those boats that you're talking about, they are small state-registered boats, and they have not been active in terms of landings in the fishery in the last couple of years.

Ms. Belcher: Yes, because this is the kind of things, again, just the little amount that I know about – I'm very familiar penaeid shrimp, but as far as the rock and stuff, those are the kinds of questions that I think, in looking that, it's a little disconcerting, especially if you're producing average sizes and such; and if there are enough numbers of those, you're probably getting a little bit of an altered view of what the potential is for that fishery, I think. I mean, I'm thinking, again, back to dory fisheries or something that use small boats and send them out. I wouldn't want to be the person out there doing that.

Dr. Travis: Yes, I mean, that's one of the pros and – it depends on your perspective, but because they are fully transferable, it allows the owner to have some flexibility in terms of how they use their vessels. I mean, personally from an economic perspective, I think this is a good thing because then it allows them to make the best possible use of the vessels that they have where they can at least retain that endorsement until they're able to actually make use of it rather than simply losing it altogether and then the endorsement is lost from the fishery completely and permanently, which I don't think would be consistent with what the council wants in this case.

And just to also state, this is not an oddity with respect to this fishery; we have seen it with the Gulf shrimp moratorium permits as well where you've got some permits. Granted, in that case,

they just need them for three or nine miles beyond, but some of them you wouldn't expect them to actually go out into the EEZ, but they've got them there.

Also, you know, they may have them on that boat, like I said, just for the time being, but they may intend on getting a larger boat on down the line and then they've already got the endorsement and they can simply move it onto that larger boar once they've got it.

Ms. Belcher: Okay, because it was relatively consistent among all of the table breakouts. It didn't kind of disappear in one particular area and then reappear someplace else. It was pretty consistent throughout, and that's where I was kind of concerned as to how that was – you know, to me that would seem like an outlier based on what you would know why that would still kind of hang in the data.

Then the only other thing I thought of was just – because of, again, this being a dynamic document, on Page 366 they talk about fuel prices, and it says that the early data in 2008 indicates that diesel fuel prices may be as much as a dollar higher than at present; you might as well go ahead and change that to two dollars because it's almost five dollars at the docks now.

Dr. Travis: Things are happening far too quickly in that respect. It's going to be difficult. We, of course, will try to keep this as up to date as possible, but who knows – when oil goes up eleven dollars per barrel in one day, who knows what is going to happen; probably none of it for the good at least for the fishermen.

Ms. Belcher: Those are my only comments. Anyone else have a comment? Well, thank you, Mike and Myra. I am going to go ahead and suggest that we go ahead and take a ten-minute break and then we'll start up on our next agenda item, which is spiny lobster.

Ms. Belcher: Okay, we're going to go ahead and get started on the Spiny Lobster Import Amendment, and Gregg Waugh is going to give us the status update on that.

Mr. Waugh: Thanks, Carolyn. I'm going to go through the Spiny Lobster Committee Overview, and I'm not going to go through the amendment document in any detail. I just want to highlight what we're doing there. The council will be approving this for public hearings. We're going out to public hearings in July and then finalizing it in September, so, certainly, any input you all want to have, this is the time to have it.

What we're looking at, on Page 1 of that overview, is in terms of regulations the minimum carapace length; we've got different regulations in the Continental U.S. versus the Puerto Rico and the U.S. Virgin Islands or the Caribbean U.S. The minimum size limit in the Continental U.S. is three inches; it's three and a half inches in the Caribbean. We've got a tail length of five and a half inches; the Caribbean does not.

Three is nothing addressing tail weight right now. Berried lobsters in the Continental U.S., there is no possession, you can't strip the eggs. In the Caribbean you can't possess on a vessel; it can

be kept in a trap; can't strip the eggs. Clip fins, there is no possession and can't clip fins at all, and there is nothing to do with tail meat.

What has happened more recently, as the harvest has continued to increase, there has been a significant harvest of short lobsters, and the big market is the U.S. What we're starting to see across the entire Caribbean is some decline in landings that's being attributed to this loss of reproductive potential. What we are proposing – and, again, this is in Section 4 of the document or on Page 2 of your overview – the first action is to deal with minimum size limits.

Of course, Alternative 1 is no action. Alternative 2 would just basically track the regulations that are in existence in the Continental U.S. versus the Caribbean U.S.; so, Alternative 2, “no person – and it should read “in the Continental U.S. would be allowed to import a spiny lobster. We're including now some tail weight measurements because that's how a lot of the product is imported in the U.S.; so, less than a five-ounce tail weight, three-inch carapace length or less, if the animal is whole; and less than five and a half inches tail length if the tail is present.

Whereas, in the Caribbean U.S. no person would be allowed to import a lobster less than six-ounce tail weight if just the tail is there; less than three and a half inches if the animal is whole; and less than six and a half inches if just the tail is present. The Caribbean and Gulf Councils did not pick a preferred. Our committee is talking about picking a preferred before we go out to public hearing.

The Caribbean Council is interested in tracking Alternative 2. There were some legal concerns that surfaced when they were discussing this that prevented them from picking a preferred. Alternative 3 would have everybody in the Continental U.S. and the Caribbean U.S. default to the Continental U.S. minimum size limits. The only other action in here is to deal with other import restrictions.

Alternative 1 is no action. Alternative 2 would not allow the importation of spiny lobster tail meat which is not in whole tail form, with the exoskeleton attached, and do not allow the importation of spiny lobster with eggs attached or importation of spiny lobster where the eggs, swimmerets or pleopods have been removed or stripped. Alternative 3 and 4 just split those two apart.

Just to brief you again on timing, our committee will be reviewing the public hearing document and providing guidance to staff. We hope they will choose a preferred alternative for public hearings and approve the import amendment for public hearings. We will have public hearings in July. Then the three councils will review and approve these between August and October; the Caribbean in August, the Gulf in August 4th through 7th, and our council at the September meeting, so you will not see this document again. That's a quick overview, and I'd be glad to try and answer any questions.

Ms. Belcher: Any questions for Gregg? Any comments on the document from anybody on the committee? Doug.

Mr. Gregory: I don't know which council is drafting this. There is a reference to the need to, I guess, protect animals below the mean size of reproduction, but there is no data on what the mean size of reproduction is. I think it would be good to include in this what the estimates of reproduction are throughout the Caribbean if that data is readily available.

Mr. Waugh: We can add that. It's being done by all the councils and the regional office; mainly between the regional office and the Caribbean. The Caribbean has been designed as administrative lead for this amendment, but we'll make sure and get that data added, Doug.

Mr. Gregory: And if there is information on the difference of reproduction between males and females, that would be important.

Mr. Chester: Gregg, this is really a science issue, but I was just curious as to what sort of input law enforcement had as far as the different sizes and whether that would present some complexities and opportunities.

Mr. Waugh: Law enforcement has been involved with this. They have come up with a lot of the drive behind this, and they have provided a lot of input into pushing to have this focus on the tail weight, because that's how they sample a lot of the product coming in and how they are marked on the boxes. Yes, they are cranked into this in detail.

Ms. Belcher: Any further comment for Gregg? Okay, seeing none, what I'm going to propose because the next two items on the agenda, Snapper Amendment 15B, we have a presenter who is not going to be available until tomorrow, so we were suggesting the possibility of moving Snapper Grouper Amendment 16 up, but because we're down to about 30 minutes I really don't want to push us too hard or have us break and then have to try to pick back up, so I'm going to actually go ahead and just have us break early tonight, so that we can pick up and keep our flowing going tomorrow morning on these two agenda items.

It's kind of other business, but it's also to give everybody something to think about, we are going to go forward with the process of electing a chair and vice-chair-elect at this meeting. You won't have to chair the December meeting. You won't officially start in the chair's capacity until June, but it's just so that we can go ahead and get people in the queue in understanding what is going to happen.

Originally we had talked about electing a vice-chair at this meeting, but in theory that means you would ascend as quick as anything and we'd still have to vote in a vice-chair. The vice-chair would move to chair, and then we'd have to vote another vice-chair, so the thought was do a chair and vice-chair-elect to start next June, but least you'd be aware of starting then. Doug.

Mr. Gregory: Do we not have a vice-chair now?

Ms. Belcher: No, we do not. It was Chris Dumas and Chris was not brought back on to the committee. John.

Mr. Carmichael: I suppose you could start at the end of the December meeting, so the preparations for the June meeting and what goes on during next spring would fall under the new chair and vice-chair-elect.

Ms. Belcher: Anyway, that's food for thought and we'll obviously bring that up under other business at the end of the meeting, but just have thoughts on who you would like to nominate or push forward or however you want to do that. Okay, with that, I'm going to go ahead and break us for the evening, and we'll start at 8:30 in the morning. We will be back here and start with Snapper Grouper Amendment 15B.

The Scientific and Statistical Committee of the South Atlantic Fishery Management Council reconvened in the Normandy Room of the Renaissance Orlando Hotel Airport, Orlando, Florida, Monday morning, June 9, 2008, and was called to order at 8:30 o'clock a.m. by Chairman Carolyn Belcher.

Ms. Belcher: I'd like to go ahead and get started. We have to revisit the Spiny Lobster Draft Document. What Gregg has asked for us to do is at least provide a motion that accepts that document as acceptable for public scoping; is that correct, Gregg?

Mr. Waugh: It would be going out to public hearing. Again, the current timeline has this approved for sending to the Secretary before you all see it again.

Ms. Belcher: I am going to need a motion from the group as to what we would like to do.

Dr. Cooper: I move that the SSC approve this document to go out for public hearing.

Ms. Belcher: Seconded by Luiz Barbieri. Do we have any discussion. No discussion, okay, all those in favor, raise your hand; any objection, raise your hand. The motion carried. Gregg.

Mr. Waugh: Given that there were no suggestions for changes or anything else, then my interpretation is this document is okay with the SSC; and, again, as I indicated, this will be approved at our September meeting for sending to the Secretary of Commerce. In the event any of you should look at it some more and have comments, please send them in to me. I'll make sure – I've got the two comments that Doug raised, and I will make sure we add that information, but if any of you have any other things you'd like to see addressed in the document, just let us know and we will add that for public hearing and ultimately for the final document. Thank you.

Ms. Belcher: At this point we'll move to our next agenda item, which the Snapper Grouper Amendment 15B, and we will get the status update from Rick DeVictor.

Mr. DeVictor: Thank you, Madam Chair. Amendment 15B is outlined on Page 9 of your roadmap, and you can see we have listed the actions in the amendment there and the timeline. The SSC has reviewed Amendment 15 and 15B is what it eventually changed into beginning in 2005. The last time that the SSC reviewed Amendment 15B was in December of 2007. At that time this group blessed the document and the amendment based upon best available science.

The actions have not changed since then. What I'd like to do is bring two things to the attention of the group here. One has to do with the action that would require the federal commercial snapper grouper permit in order to sell catch. Right now you can sell up to your bag limit of catch without having the federal commercial snapper grouper permit. The council, in Amendment 15B, is looking to require that you have that permit in order to sell any catch.

What happened during the public hearing stage is we heard quite a bit comment from the public that the discussion of impacts is not complete on this action, particularly pertaining to the social and economic effects. They highlighted that we did not look at all the trip ticket data. What happened is the council and NMFS in March decided to prepare a supplemental environmental impact statement.

That went back out for public comment, and that included the economic and social impact discussion in it. We will be getting a presentation on that from Dr. Holiman to my left. What we are looking for is for you guys to receive that presentation and then, again, bless this based upon the best available science. That's the first action that we are looking for.

The second one has to do with one action that would establish allocation for snowy grouper in the amendment. The council's current preferred alternative specified 95 percent commercial and 5 percent recreational. In the wording of that alternative, there is a poundage associated with that, and, again, I'm talking about snowy grouper.

What the council talked about in March, when they last met and went through this document, is that they feel that the recreational allocation should be monitored in numbers instead of pounds due to the uncertainty around the MRFSS estimates of weight for the recreational sector. The Science Center has put together a memo that converts the weights to numbers. I believe Andi e-mailed that to the group, and we'll be getting a presentation from Erik Williams on this in a minute.

Basically, I'll just highlight that the memo really gave two options for what the numbers would be. Again, the allocation specified in 2009 for the recreational sector would be 4,400 pounds gutted weight. Without further do, I think probably, Madam Chair, the best way to proceed is to have Dr. Holiman give his presentations and then get comments and then have Dr. Williams give his.

Ms. Belcher: That's fine; Dr. Holiman.

Dr. Holiman: Good morning, everybody. Thanks for the invitation here. The first slide is just the obligatory cover page. All right, just, again, to put this into context, the original analysis that you saw way back in December is the context of the bag limit sales prohibition was developed largely from purely a recreational perspective. We've since learned that, no, the action itself was intended to encompass all bag limit sales regardless of whether they were from a recreational origin or not.

As indicated in the public comment, there were statements that there was a great deal of information that potentially was available from the state trip ticket data, and so we accessed that data. For the methodology for this assumption, we utilized 2004 through 2006 state trip ticket data. We stopped at 2006 because the 2007 data was not complete at the time when we conducted the analysis.

I have to give thanks and kudos to the analysts who actually worked the state trip ticket data. We had Alan Bianchi in North Carolina that kind of got this kicked off and established the benchmark for what could be done; Robert Wiggers from South Carolina; Julie Kaliff from Georgia. The Florida analysis was conducted in-house by John Vondruska because we had access to that data, and we've had a little bit more experience working with the Florida trip ticket data, but we did get some assistance from Chad Hanson as well.

All right, from the state trip ticket data, which I presume most of you are aware, each of the states have a trip ticket program and they require a commercial sales to be matched with a trip ticket. It requires and landings and value for all species sold or marketed through the state trip ticket system and stuff.

What we did was we identified all vessels that sold snapper grouper in any one of these three years, and we tabulated all the snapper grouper landings as well as the harvest of all other species by those entities; not necessarily on those snapper grouper trips but on all other trips that those vessels made in those individual years. That way we could have a picture of not only all their snapper grouper sales but also the magnitude of their total operation in marine sales activities and stuff.

The data were analyzed by permit type; and from here we had those. We identified the vessels that had the federal commercial snapper grouper permit; vessels that had the federal for-hire snapper grouper permit; and the third permit type was for vessels – was those catch-all vessels that could not be associated with either of those two federal permits. The data were evaluated by water type, recognizing that the council's actions strictly only apply to fish harvested from the EEZ, so we needed to get a sense of what water body the fish were originating from.

They were evaluated by species type, which was largely snapper grouper species versus all other species harvested and sold by these entities. Within this analysis, if a vessel – you're probably aware certain federal vessels have both the federal commercial snapper grouper permit as well as the federal for-hire snapper grouper permit.

For vessels that had both permits, we lumped them into the commercial group on the presumption that if in fact the measure goes forward as proposed, if the federal commercial permit is required, those vessels would still continue on with their activity, as they currently do, and land those fish and have them recorded under their federal commercial permit.

The effect of this assumption is it will likely – to the extent that some of their harvests may have in fact been harvest under purely for-hire recreational trips and not commercial trips, the effect of this assumption will slightly inflate the amount of harvest attributed strictly to the commercial

sector and deflate a little bit the amount of harvest associated with the for-hire sector itself. But, again, the presumption is if the measure goes forward as proposed, that those fish will still be harvested and sold under their commercial permit.

Now the caveats to the assessment; we did not look at the individual landings for the records to see if the quantities actually seem to represent actual bag limit quantities and stuff. We simply evaluated the harvest according what permit category they fell under; and any harvest associated with a vessel that could not be linked to one of the federal permits, those were assumed to be bag limit quantities of fish without actually looking at the records themselves to see if it was five grouper or five snapper or something like that.

We did not get into the details of the actual trip tickets to see if the poundage of fish reasonably represented a bag limit sales quantity or not. We had significant vessel ID matching problems in some instances, and, obviously, any vessel ID matching problems is going to result in overestimation. Again, you're probably aware that all vessels have a unique ID and we associated vessel IDs with the appropriate permits based on that ID and stuff.

Wherever there are any data issues or typos or that sort of thing, you're going to lose vessels and stuff. Dealer matching was particularly a problem, and I'll say a little more about that in a moment. It should be clear that this analysis cannot account for any illegal sales. This only captures fish that goes through the state trip ticket system. Any sales that occur outside these normal channels, it cannot account for that.

Obviously, in the future, in response to the proposed management action, we will not be able to capture these illegal sales. One more comment on this vessel ID matching problem; some of you may have seen some of the preliminary estimates that we got just from North Carolina when we first started going down this path, and I believe the analysis did 2001 through 2005, and you may have some numbers in mind as to what the magnitude of some of those potential bag limit sales were.

We learned through the exercise – well, first we decided to emphasize more 2004 and 2006 because there was more current data, but we also – that initial analysis, what it did was it grabbed vessels that were active in the fishery at a point in time and walked those same vessels back in time, all the way back through 2001. What we learned was that as you go back in time, you get vessel leakage.

The changes in registration, transfer of vessels and stuff, taking a single universe of vessels, the further back in time you take that, you get more problems with the inability to link those with trip ticket data. What that tends to do is inflate the magnitude of harvest that cannot be associated with one of the federal permits. What we did in response to that was we went back and we got a unique set of vessels for 2004, a unique set of vessels in 2005 and a unique set of vessels in 2006 and compared that with the records for the respective data years and got a much better match.

All right, results; the results of the analysis were that approximately 16 percent of the average annual total snapper grouper sales in terms of value – this is X-vessel value, nominal X-vessel value – were categorized as bag limit sales, and that equated to approximately 1.4 million pounds valued at \$2.4 million. It was 18 percent of pounds but approximately 16 percent of the average annual dollar value fell into this category of bag limit sales. These are landings that could not be associated with either of the federal permits.

For the for-hire sector within this \$2.4 million, approximately \$300,000 was associated with for-hire vessels or vessels that had the federal for-hire permit; and approximately \$2 million or 1.2 million pounds was associated with vessels that could not be associated with any of the federal permits. Now what this equated to – for the for-hire sector this was approximately 17 percent of their fish sale revenues; and I need to emphasize it's only revenues associated with fish sales.

This is important later on because you recognize the for-hire sector, the bulk of their revenues, the presumption is it is generated from charter fees and not from fish sales, but 17 percent of their fish sales were snapper grouper species. The flip side of that says 83 percent were other species other than snapper grouper.

Within the fleet that could not be associated with a federal permit, the \$2 million, that was approximately 7 percent of the average annual sales revenue per vessel; so 17 percent for the for-hire sector and 7 percent for other vessels. Within this \$2.4 million, approximately 70 percent of the bag limit sales quantity came from Florida/Georgia. I think that came to about \$1.7 million. The remaining 30 percent was from North Carolina and South Carolina.

I have to note that because of confidentiality issues we had to lumpings there; North Carolina and South Carolina and then Georgia with Florida and stuff. But, within that Florida/Georgia category, as you might imagine, that was dominated by Florida activities. All right, Result Number 2; when we looked at the state versus EEZ breakout, approximately 9 percent of the bag limit quantities of fish came from state waters.

The bulk of it was EEZ, but there was 9 percent that came from state waters and potentially would fall outside the scope of the proposed action. When it came to an evaluation of fish marketed through a federal versus a non-federal dealer, 21 to 35 percent of the bag limit sales were sold to non-federal dealers. Now, the reason we have a range here was that we had a very acute problem with matching the state dealers with federal dealers.

When you look at fishing from a vessel perspective, you have a unique vessel ID. When you deal with dealers, however, there is no unique identifier for which you can match dealers in the federal data base with dealers in the state data base. There is no unique tax code that is captured through the system or any other type of thing like there is a vessel ID.

What you're reduced to doing is comparing name of owner or name of business or name of whatever; and because of different naming conventions in the different data bases, it becomes a nightmare, and you're ultimately, in many instances, forced to do a visual comparison and stuff. We had a particular problem for Florida.

Rather than go strictly with the Florida results, we did it in two different ways. We took the federal dealer/non-federal dealer breakout for North Carolina and South Carolina and applied that universally across the entire southeast, and that resulted in the 21 percent, and then we used the other results as is and that results in the higher number for the range and stuff. Now, with all these results, if there are – obviously, if there are compatible regulations that have been imposed by all the states, the expected reduction in bag limit sales, the value of bag limit sales to entities engaged in that practice would be that full \$2.4 million on an annual basis.

If you have no compatible regulations in any state, then that \$2.4 million is reduced appropriately down to the approximately 1.4 million to 1.7 million. That's utilizing the 9 percent ratio of fish originating from state waters and using the 21 to 35 percent proportion of fish that are marketed through non-federal dealers and stuff. And then we've got results by the different sectors, the for-hire sector and those vessels that could not be associated with either of the federal permits.

Within the analysis, each year we had approximately 717 entities per year that could be associated with the federal commercial permit that recorded snapper grouper sales. Now to put that in a little bit of context, over these three years there were approximately 930 vessels that had active federal commercial snapper grouper permits that could have fished and recorded landings over that time period, but we only identify or associate landings with 717 of those entities.

Within the for-hire sector, and these are vessels that have the federal for-hire permit, you had an average of 159 entities per year with recorded snapper grouper sales. Put that in context, there was about 1,340 vessels that were permitted in each of those years – average in each of those years to operate in that fishery.

Now, understanding, of course, some of these 1,342 also have the federal commercial permit and would be included in that first bullet. Now, within the entities that could not be associated with any federal permit, we had over 1,400 entities per year with snapper grouper landings. Now, when you add these two together over that period of time, you had over 1,700 vessels operating in that federal commercial fleet, but you had about 1,600 vessels that were not in that federal fleet that were engaged in selling what we would constitute bag limit sales of snapper grouper.

The final results; what I've discussed thus far deals with, okay, this is what is going to happen to those entities that are engaged in the practice of making bag limit sales. Now, the motivation for the action itself is – obviously, what is not recorded here is the importance of this issue of data integrity. We want to eliminate the possibility for double counting fish being recorded in the recreational survey as well as showing up in the commercial data collection programs as well, so we want to do something to clean up that situation.

The expectation is better data is going to result in better assessments and better management. Obviously, another motivation for this, too, is it's less so from absolutely reducing harvest as it's sort of harvest neutral, but part of the motivation here is to take those revenues associated with

fish in this fishery and transfer those revenues to the people that are operating in the commercial federal snapper grouper fleet.

Obviously, we've established TACs and quotas for the harvest for these sectors, and every fish that's harvested under the bag limit, it's not available to them, so the motivation here is to make these bag limit sales revenues available to the commercial fleet, to both make up for – well, not to make up for – to mitigate some the adverse impacts that have occurred on this fleet as a result of Snapper Grouper Amendment 13C and other measures that the council is contemplating right now and will contemplate in the future and stuff, but to reserve these revenues for the fleet for which they were designed.

From that perspective, the presumption or the expectation is that the fish and the revenues that is discussed above, the 1.4 million pounds and \$2.4 million in average annual X-vessel revenue, will in fact be transferred to this federal sector. Now we have to recognize, though – and so that would be a benefit to the federal commercial fleet, so you take it away from those engaged in bag limit sales and you've transferred these revenues to the federal commercial fleet.

Now, we have to recognize, though, that this transfer may not be complete; it may not be a hundred percent, and there's a variety of reasons for that. To me one of the most important reasons is, one, we recognize that relatively few of the snapper grouper fisheries are currently operating under quota. Although in the future most, if not all of them, will be subject to commercial quotas, relatively few of them right now are subject to quotas and those involved in the commercial fleet aren't necessarily prevented from harvesting those fish due to quota closure and stuff.

Many of the harvest distributions right now may in fact be due to circumstantial sort of fishing behavioral types of things, where you fish, when you fish, how you fish and not due to some of the federal regulations and stuff like closures and stuff. Taking these fish out from the bag limit channels may result in some of these fish in fact not being harvested by the federal commercial fleet.

In order to capture those fish, they may have to change their harvest procedures and processes, again, where they fish and how they fish in order to get some of those fish, but a hundred percent transfer may not occur. I know there has been some discussion – some of the key species that this might occur is some of your mangrove snappers, your yellowtail snappers and stuff may in fact largely occur by vessels that don't fish quite so far offshore, fish in the inshore waters and things like that and stuff, so you may not have a hundred percent transfer.

Again, even though for those fish and revenues where we expect a transfer from one sector to another, you may still have some distributional effects in the sense that who these fish are marketed, the individual communities and the individual dealers and stuff, the path through which these fish are marketed by those engaged in the bag limit sales, if those fish are then in the future harvested by those that operate in the commercial fishery, it may not go through the same exact market channels and stuff.

Largely we think they will because, again, the centers for the commercial fleet are largely the centers for the bag limit fleet themselves. I mean, it's basically the same communities and staff, but it may not be exactly the same dealers and stuff. You may have some effects there as well, some distributional effects. That's it. Questions?

Mr. Gregory: You know, one thing, at least in the Keys the bag limit landings do have a different market or can have a different market than the commercial landings. In the Keys there is no distinction between where commercial and recreational people fish for gray snapper and yellowtail. They are side by side. I mean, the reefs, the deep water is five miles from shore. My question is of these different categories you've identified, are any of them engaged in illegal activities? I'm not that familiar with it, but it seems like to me bag limit sales to non-federal dealers may be illegal but I'm not sure. That's why I'm asking that question.

Dr. Holiman: Well, again, recall that I said nothing we're capable of doing right now can capture illegal activity, so you mean by illegal is black market channels –

Mr. Gregory: No.

Dr. Holiman: -- any sale doesn't generate a trip ticket is not captured in here.

Mr. Gregory: No, I thought snapper grouper sales had to be sold to a federal permitted dealer?

Dr. Holiman: Not at the state level.

Mr. Gregory: Not at the state level?

Dr. Holiman: Commercial quantities or fish harvested, my understanding is – and somebody else may help me out here – fish originating from the EEZ, in order to sell commercial quantities they can only be sold through a federally permitted dealer and stuff, but bag limit quantities of fish can be sold through either federal or non-federal permitted dealer and stuff. As far as I could understand – we did quite a bit of looking at, again, what did the states allow and what they didn't allow and we didn't identify anything that indicated that what was happening was outside legal channels from that perspective.

Dr. Whitehead: Stephen, I think it was in December we saw an outline that you put together of a recreational model, and that's what you said at the beginning of your presentation is that you redirected your focus to commercial.

Dr. Holiman: No, the recreational model that you saw in December was largely developed for the measures that were utilized in 15A when you talked about establishing different alternatives, MSYs and OYs levels, for the different species, and we also attempted to use this when examining the allocation decisions and stuff. But with regards to this analysis here, the original text – and I think the title for the action itself was “recreational sales”; not bag limit sales, recreational sales, understanding that any recreational activity would be subject to the bag limit

The concept of recreational sales versus bag limit sales is different because recreational sales would be the sale of fish harvested through a recreational activity. It wasn't until a substantial amount of time later that we recognized that there was a sizable amount of activity by purely commercial vessels that were excluded from the federal commercial fleet. They didn't get one of the original permits and they couldn't afford to buy one, and so they were engaged in commercial activities exclusively but their snapper grouper quantities were limited to bag limit quantities.

So you still had these two categories here, sales of fish that originated from purely recreational activities and then bag limit sales of fish that originated from vessels engaged in purely commercial activities and stuff. The original assumption was if fact we're strictly looking at recreational sales, none of the data bases, federal or state, really allow you to capture that. I had this discussion with those that were doing the analysis of the trip ticket data and stuff.

Even within our system, because of the allowances or the nuances by which people can get their permits to sell, we can't determine whether this is a recreational activity or a commercial activity, so you can't make that distinction.

Dr. Whitehead: Back to the original model that you showed us, did you try that for the allocation analysis in this amendment?

Dr. Holiman: Yes.

Dr. Whitehead: And data deficiencies prevented that thing from running?

Dr. Holiman: No, what we concluded for the allocation analysis, the numbers that were generated from the recreational were sufficiently different than what was generated on the commercial side, that they weren't comparable. We couldn't add the recreational numbers to the commercial numbers and come up with a net benefit to the nation sort of number, so we said we're not prepared to go in that direction at this point in time.

Dr. Whitehead: And that's what led to the strike-throughs and the italics in the amendment about measuring recreational in terms of numbers?

Dr. Holiman: With regards to the allocations?

Dr. Whitehead: Yes.

Dr. Holiman: I would presume so. Yes, Jim did his model similarly for the OY/MSY discussion and the allocation thing and I did mine, and we were able to add them up when it come to those other types of actions, but for the allocation we decided they are too different, the numbers are too different so they're non-comparable so it was best not to use them.

Dr. Whitehead: Are those results in the amendment somewhere? I couldn't find it.

Dr. Holiman: No.

Dr. Whitehead: Can I see them sometime?

Dr. Holiman: Certainly. Any other questions on the bag limit analysis?

Mr. Waugh: At the risk of repeating some of this, but just to be clear, any federal permit holder has to sell to a federally permitted dealer. Then during the spawning season closure, all sale is prohibited, so any of the sales that are taking place during that time period would be illegal sales.

Ms. Belcher: Any further questions or comments for Dr. Holiman? Thank you for your presentation. I guess we'll go to Erik's presentation now.

Dr. Williams: It's kind of a minor issue but it's an important one. As Rick mentioned earlier, for monitoring the allocation for recreational catch of snowy grouper, it's probably best to do it in numbers, and in the assessment we had done all the calculations in poundage, so we had to convert back. It's not as straightforward as it seems, and I'll go through what is involved, and there is going to be a decision that needs to be made.

Part of the problem is the MRFSS sector does not intercept snowy grouper catches very well at all. It's practically zero. They don't get any weight estimates. The only estimates they do provide are the catches in numbers, and hence we'd like to have the allocation in numbers. From the assessment, the catch limit is in weight so we need to convert that from weight to numbers. What we need to know is how a snowy grouper caught in the MRFSS sector weighs, what is the average weight?

In the assessment, if we wanted to follow the assessment guidelines, we applied the headboat selectivity to the MRFSS component within the stock assessment, so basically we assumed we could get a selectivity estimate from the headboat sector, and we just assumed that the MRFSS sector had a similar selectivity as that.

One solution would have been, well, why don't we just use the average weight from the headboat, but, again, we're facing a problem of very few samples even from the headboat sector as well. In fact, on average we only get about four weight samples a year for the whole snowy grouper fishery. The solution we looked at is sticking with the stock assessment and basically go with a selectivity times an age structure times the weight-at-age function, so shown here is just the average weight at age.

Then the age structure we used would be the equilibrium age structure at FMSY, which corresponds to roughly – the reduction in F was bringing F down to almost FMSY, a little less than that, so the equilibrium age structure at FMSY is probably appropriate. The problem here is what to use for selectivity. The headboat selectivity from the stock assessment is shown here, and it's a strong dome-shaped function, basically indicating that the headboat really only captures the pretty much immature snowy grouper, just the young ones, age one up to age seven.

Those are pretty much all immature fish. The problem is we have – since the assessment has been done, we have a lot of indications that the recreational sector is now heading into the deep water and capturing big, older fish, particularly off of northern North Carolina and Virginia. That would suggest that dome-shaped selection assumption is completely inappropriate.

I ran the analysis assuming a flattop-selection function. It basically follows the headboat selectivity up to a point and then just assumes full selection beyond age five, roughly. Here is the result. There are two basically – depending on which assumption you make, the allocation of 4,400 pounds in weight converts to either 1,100 fish or 500 fish depending on which selectivity assumption you want to make

There is a big difference in the numbers. Those are actual numbers so keep that in mind, too. We're talking about very small numbers of fish here. I think that's it, so the decision is which conversion factor to use, the one based on the headboat selectivity or the one based on the flattop selection function. Really, this depends on to what degree this offshore recreational fishing is occurring.

Just to put it in perspective, something indicated in an e-mail – I think it was Jeff Oden – and it got circulated a little bit that that bottom right photo, if you weighed all those fish, it roughly corresponds to about 7 percent of the quota right there in one catch. We're dealing with really small numbers. I think that's the decision that needs to be made by the SSC is which conversion to use, either the dome-shaped selectivity function, which in this case would be indicated here as the headboat fishery, or the flattop selectivity assumption.

Mr. DeVictor: I just have a question. I assume that the recreational section mostly lands their fish whole weight. If we went to numbers for whole weight fish, it is simply just converting the gutted weights to whole weight and then applying that conversion factor?

Dr. Williams: Yes, that's correct.

Mr. Gregory: Do we have a copy of this anywhere that we could just look at and think about his presentation some more, or do we have any background documents?

Dr. Williams: There is a memo that was sent – is that in the briefing book?

Mr. DeVictor: It was Attachment 8 to the Snapper Grouper Committee materials, and Andi e-mailed the memo around, too.

Dr. Cooper: Erik, what does the commercial selectivity function look like?

Dr. Williams: It's a logistic function, a flattop selection.

Dr. Buckel: Erik, just for clarification, when you showed the picture and the comment about just the weight of those fish would represent 7 percent of the weight estimate here; so are you

concerned that this estimate – were you pointing out that this estimate of 4,400 pounds is probably way off?

Dr. Williams: No, what I'm suggesting is the assumption of a dome-shaped selection function is completely inappropriate. The question is whether going all the way to a full flattop selection function is appropriate, and I think it is because of the potential magnitude of those bigger, older fish in the total catch.

Mr. Gregory: But didn't you say your evidence for the flattop just came from the Virginia and North Carolina border area and not from the whole fishery?

Dr. Williams: That is correct, but that's why I'm saying even though it is just from that area, the magnitude of it is pretty large, potentially.

Mr. Gregory: In the Keys, again, the commercial and the recreational fishermen fish the same area, so there I think their selectivity would be the same, but doesn't this call into question the assessment itself, the validity of the results, if the assessment used the dome-shaped based just on headboat data?

Dr. Williams: That is a very good question, too, but I would say it doesn't because this assessment was using data through 2002 or 2003. It's a dated assessment at this point. At that time we didn't have any indication that this deep water recreational activity was really going on very much. At least off North Carolina and Virginia, it's ramped up just within the last three or four years.

Mr. Gregory: If I may, in the Keys it's always been the same since the seventies, so maybe it calls into question that we need an update assessment for snowies to look at this in more detail. I go back to our mutton snapper assessment; we found older fish being caught by the longline fishery, but it wasn't because they were exploiting a virgin stock. It was because our knowledge expanded of what was going on in the ocean. My question is, is this a new behavior that just started north of the Florida Keys or is it a behavior we've just come across of the fishermen going into deeper water?

Dr. Williams: My understanding of it is that it's a new phenomena at least up in the North Carolina/Virginia area. To answer your question about needing a new update assessment, it's scheduled for 2009, I believe.

Mr. Waugh: Doug, what average weight are the recreational and commercial fishermen landing? You said they were the same; what is the average weight that you're seeing down in the Keys?

Mr. Gregory: Well, I'm not seeing them. I don't fish for them and I'm not the port agent, but I know they fish the same areas and they fish with the same technique except that the recreational use electric reels, electric recreational reels, and the commercial guys will use more hydraulic bandit-type reels, but they fish the same areas, the same humps, so I presume they'll catch the

same fish, but I have no idea what sizes they are. I sampled the fishery 30 years ago, but that's no good now.

Ms. Belcher: Any further questions or comments for Erik? I guess, Erik, what you're needing from us is what the group would endorse one way or the other for the next stage within 15B? I'm assuming this is a component that we need inserted; correct?

Dr. Williams: Yes, actually, I don't need anything from you.

Ms. Belcher: Okay, what's the pleasure of the group? Andy.

Dr. Cooper: I'm curious if you apply the flattop selectivity curve, any idea what the implied size distribution of the recreational catch is?

Dr. Williams: I compute that but shown up there is the average weight. I think that gives you some estimate. There is a difference between the dome and the -- and if you look at the last two numbers on the right there, that gives you an indication of the difference as far as just average weight.

Dr. Buckel: Erik, do you know offhand how that average weight from the flattop selectivity in the recreational fishery compares to average weight in the commercial?

Dr. Williams: Yes, that's a good question. I think that's actually a little bit smaller than the commercial because the selectivity pattern for the commercial, although it's flat-topped, does capture slightly older fish, so they don't capture fish generally below age seven or so.

Dr. Barbieri: Erik, then if I understand correctly, you decided you're going to use the flattop selectivity to make the conversion and you're presenting this for our information?

Dr. Williams: I am deciding nothing. I am simply presenting an analysis of two alternatives, which one is consistent with what was done in the stock assessment; the other seems to be more consistent with recent information about activity in the recreational sector in deeper offshore waters off North Carolina and Virginia. That's all I will say.

Dr. Barbieri: Well, I'm just trying to understand. If no action is required from us, what is the purpose of the presentation?

Mr. DeVictor: Just let me clarify what we're looking for here. John alluded that in the wording of the allocation alternative there is crossed out language right now, because the wording right now says the recreational allocation in 2009 will be 4,400 pounds gutted weight. What the council wants to do is monitor that in numbers. That's why we asked the science center to give us that information.

We need a recommendation from this group on which of these to use and we'll plug that into the wording of the alternative and that will go into the proposed rule and such. Does that clarify

what we're looking for here? We need a recommendation that can go forward to the Snapper Grouper Committee.

Mr. Gregory: My question is what is the relative landings – I guess commercial and recreational – of the Florida Keys, North Carolina and then the rest of the South Atlantic Region, so those three regions? If the majority of landings are the Florida Keys and North Carolina, that would lend me to go more with the flattop as being represented of the fishery, but I don't recall what the relative landings or effort is in these regions.

Dr. Williams: I think we can look that up. I think in the assessment there is a state breakdown of landings, so we can check that.

Mr. Gregory: But not just state; if you can break out the Florida Keys; like maybe South Florida; Miami-Dade and the Florida Keys together because they probably – or southeast Florida. See, south of Cape Canaveral we have a relatively small shelf, and so the fishery there is prosecuted differently than north of Cape Canaveral or north of Fort Pierce.

Ms. Belcher: Christine, do you have something that you want to say?

Ms. Burgess: Well, if this is a phenomenon to the North Carolina area, is it possible to apply the flattop just to North Carolina and then the dome shape to the rest of the South Atlantic?

Dr. Williams: That would be pretty complicated. This is a coast-wide assessment and we didn't sort of break things up. I mean, you could start to look at ratios of landings between the Carolinas and the rest. One of the other issues here is we're dealing with a dated assessment, as I mentioned. I can't remember the last year of data, but it was either 2002 or 2003 in the assessment, and this offshore fishery that seems to have blossomed off North Carolina and Virginia is within the last three or four years, so that ratio of landings between areas has certainly changed, and we don't know what it is yet. It would take a little more analysis, for sure.

Mr. DeVactor: Doug, this to your comment. If you go to the Snapper Grouper Committee folder – and it's Attachment 18 – we have landings by state. It's Page 19. I think we also have recreational landings by state, but we definitely have commercial from ALS. Go down to Page 19 and 20, and I could project that, if you'd like me to.

Ms. Belcher: That would be good, Rick, actually, if you don't mind doing that. Scott.

Dr. Crosson: I just wanted to say whatever that ratio is it's probably already a little bit dated. I know that there is MRFSS data that was released recently shows that the charterboat trips off the Banks are down 30 percent so far this year. Again, from the price of fuel not as many people are going out.

Mr. Gregory: It looks like on the commercial sector North Carolina and Florida together land about two-thirds.

Ms. Belcher: Is there further discussion from the group on this? Doug.

Mr. Gregory: Yes, it's interesting on the next page, on 20 it shows that the majority of the headboat landings are from South Carolina. That's significant because the dome-shaped curve, then, really reflects South Carolina headboat landings and not fishery-wide necessarily. I mean, I'm looking at just '86, the last year, 3,500 pounds or 3.5 million pounds or whatever it is as opposed to the other states combined landing about 600, so it's almost eightfold, ninefold difference.

That leaves me to be less confident of the dome-shaped selectivity as being representative of the whole recreational fishery unless the MRFSS Survey shows that most of the recreational harvest is taken from South Carolina. Then it would be more appropriate. Do we have the MRFSS data as well by state?

Mr. DeVictor: The next table.

Mr. Gregory: Well, it looks like it's Florida and North Carolina from MRFSS, whatever it is. So, do we have a South Carolina fishery or do we have a Florida/North Carolina fishery or both?

Dr. Pollock: I just wondered about the quality of this MRFSS data; I mean, stating the obvious. I just had to say something.

Ms. Belcher: Any further comments or questions? Christine.

Ms. Burgess: If we have to make a decision on this to come up with numbers, wouldn't it be most appropriate to go with the most risk-averse numbers and therefore go with the flattop curve?

Ms. Belcher: That's a good question for the group. How does everybody feel on that? I see a lot of nodding heads.

Dr. Barbieri: Yes, I agree, that would be the best approach. In that case it seems to me that although the flattop seems to be imperfect, it's the best that we have going compared to the dome-shaped selectivity. I'm ready to make a motion to that effect, if that's necessary. **I'll move that the flattop selectivity curve be used for conversion of weight to number in snowy grouper for Amendment 15B.**

Ms. Belcher: Second for the motion?

Dr. Crosson: Yes, I'll second it.

Dr. Cooper: I'm not entirely – this isn't pro or con to the amendment, but I'm not entirely sure if that will work out to be the most conservative approach. Keep in mind it will give us the lower number of how many fish we want to catch, but the assumption is that most of those fish are

going to be old, mature fish; whereas, with the dome shape you're assuming they're almost all immature fish.

So, which is the more risk-averse, risk-prone measure, I'm not really sure because there is going to be a feedback somehow, because we're going to have to be consistent. If we're assuming a certain selectivity for now, how is that going to filter back into the assessment process and the assumptions about are we catching 500 immature fish or 500 mature fish and how does that work out into the dynamics?

Dr. Williams: No, my understanding is this is only going to be used for monitoring the quota and it's not going to be anything other than that.

Mr. Gregory: Erik, does that mean that the recreational fishery is not closed when the quota is met, so it doesn't really matter, but that wasn't my original question.

Mr. DeVactor: That is up to the council and that's what we talked about with Amendment 17; it's the responsibility of the council to restrict catches to your annual catch target. This is talking about how you monitor it, but it's really going to be Amendment 17. If you close the fishery when you meet it or what have you, the council still has to discuss that.

Mr. Gregory: If I may, my original comment to the question of risk averse; we don't know for sure what the selectivity is of the recreational fishery. If we assume it's the younger dome shape and allow 1,100 fish to be caught but yet there are adult fish as much as juvenile, that's going to be more risky than if we assume it's flat-topped and they're adults but only 500 juveniles are caught as opposed to 1,100 juveniles or 1,100 juveniles and adults.

It seems the flattop is more risk averse, but it would be nice to have some economic and social impact analysis to go along with that because it could be a major impact if we're talking about 50 percent difference or a hundred percent difference in the actual quota.

Dr. Barbieri: Doug, but this is just for conversion of the MRFSS catches, so that will be recreational only.

Mr. Waugh: Two comments. This an important enough issue that I would suggest that after "weight" you put the weight, the 4,400 pounds gutted weight; and after "number" you put the number "523 fish" so it's absolutely clear. The second comment is we've spent a lot of time on this. We've got a lot of other things to discuss, and the council has already weighed the socio-economic impacts of coming up with that allocation of 4,400 pounds. All we're talking about here is the desire to track that in numbers, so what is your recommendation for a number?

Ms. Belcher: Further discussion?

Dr. Jiao: I have a few concerns about this study. The first was because in the document, Attachment 8, the conversion factor, that document said in the most recent years the samples have too small and equals four per year. That's one concern that I have. Another concern that I

have is the stable distribution. The most recent stock assessment shows that the fishing mortality is about three times of the FMSY, so maybe we can use the current fishing mortality to derive the age distribution. The difference in the numbers may not be that large and may – well, it's just my concern.

Ms. Belcher: Okay, any further comment or discussion? Do we have to do anything because of the changes made? Okay, we're going to read back in the motion. Luiz, we have to reread the motion.

Dr. Barbieri: Okay, I'll read the corrected language for this motion: Move that the flattop selectivity curve be used for conversion of the recreational allocation in weight to numbers for snowy grouper in Amendment 15B. This would result in converting the 4,400 pound allocation to 523 fish.

Ms. Belcher: Okay, Scott, do you still have your second?

Dr. Crosson: Yes.

Ms. Belcher: Okay, any further discussion? At this point we'll put it to a vote. All those in favor, please raise your hand; any opposed. The motion passes. The other actions that we have under this is because there was still discussion about the economic – we were reviewing the economic and social analysis of the action to modify the sales restrictions. This is where we're going to have the discussion and is everyone in agreement with what Dr. Holiman has put forward? Do we feel that is best available science? I'm assuming that's what we're being asked there. John.

Dr. Whitehead: Yes, that's the best available science.

Ms. Belcher: Can we have a motion for that?

Dr. Whitehead: Yes, move that is the best available science.

Ms. Belcher: Do I have a second?

Dr. Larkin: I second it.

Ms. Belcher: Any further discussion on this item? All those in favor of the motion as it stands, raise your hand; any objection. Okay, the motion passes. The next item, again, under this action item is determine if Amendment 15B is still based on best available science given the new economic information, so I guess that almost addresses the same issue. Then our final action under this item is to approve Amendment 15B. Gregg.

Mr. Waugh: Just a question about Action 4.5, which is to monitor and assess bycatch – and this is on Page 201 of the PDF document – a number of the SSC members serve on SEDAR Assessment Panels, and we've got three assessments currently underway, king mackerel, Spanish

mackerel and vermilion snapper. The Magnuson Act requires the council to specify a data program that will give us estimates of bycatch.

This methodology exists. The ACCSP methodology has been approved by all the east coast councils, the states and NMFS. The current action that is preferred adopts that as a long-term methodology but does not implement it now due to lack of funds. At each of these three assessments we've run into issues where we don't have adequate bycatch information while we're conducting the assessment, and we're not putting in a data collection program that will collect the data. I was just wondering what the SSC's thought were on the council's preferred action here.

Dr. Buckel: Gregg, is there any indication when that funding will be available for that ACCSP?

Mr. Waugh: No.

Dr. Whitehead: Carolyn, on that motion; is that a blanket best available science? I made it but is a blanket best –

Ms. Belcher: We'll have to come back to that because I was just reading that language. We'll have to put another motion for it or modify it.

Dr. Whitehead: If I remember it was the social analysis that was the hangup at the December meeting on the allocation alternatives and so I guess do we need to explicitly address that at some point?

Ms. Belcher: Yes, I'll come back to that topic again. Are there any other comments or suggestions that we can provide to Gregg relative to this one particular alternative? Erik.

Dr. Williams: I just was a little unclear as to what the difference really was in the wording between Alternatives 3 and 4 and 2 with respect to monitoring the bycatch. I mean, I guess two are adopting the ACCSP, but just maybe you could clarify what the difference is between those, 2, 3 and 4.

Mr. Waugh: Alternative 2 adopts the ACCSP Program as the long-term goal and says that right now we're going to continue to use the existing programs. The problem there is that the existing programs are not giving us the estimates of bycatch that we need to do the assessments. Alternative 3 would adopt the ACCSP Program now, and that program lays out certain sampling levels, certain numbers of trips that have to be selected, certain levels of putting observers on board vessels.

So, Alternative 3, if approved, would require that we start monitoring and putting those programs into place. Alternative 3 would implement this methodology; Alternative 2 says that long range we would like to implement that program, but we don't have the money to do it now so we're going to continue with our existing data collection programs.

Dr. Williams: And what about four?

Mr. Waugh: Four basically describes our ongoing program.

Dr. Williams: So my understand is two hope that we get ACCSP up and running; three would force us to get ACCSP protocols up and running. Is that sort of –

Mr. Waugh: That's correct.

Ms. Belcher: Any comments or discussion on this for Gregg?

Dr. Reichert: Gregg, so Alternative 3 would require funding?

Mr. Waugh: Yes, it's just like any other data collection programs; that if they are ultimately approved by the Secretary of Commerce, then that would obligate the Secretary of Commerce to begin collecting that data. The issue the council faces is the requirement of Magnuson that we put in the methodology that would collect bycatch data.

Dr. Buckel: Gregg, this is probably a naïve question. Why was Alternative 2 the preferred instead of Alternative 3 from the beginning?

Mr. Waugh: I think the question was why is Alternative 2 the preferred? It's recognizing that right now the National Marine Fisheries Service does not have adequate funding to implement ACCSP.

Ms. Belcher: Further comment? Okay, coming back, then, to what we had said earlier, we've put a motion up to basically accept that specific socio-economic evaluation that Dr. Holiman presented. What we also need to do is determine if 15B is based on the best available science given the new economic information; so incorporating this into it, do we still continue the overall endorsement for the amendment. If so, we need to approve the amendment to move forward, so I'm going to asking for, again, a motion from the group.

Dr. Whitehead: It looks like the social analysis has been beefed up in the amendment to satisfy our concerns from December.

Ms. Belcher: Any other additional comments before we find someone volunteering to make the motion for us?

Dr. Barbieri: Yes, I'll make the motion.

Ms. Belcher: Okay, do we need added language as far as approving it. Are we going to make it endorse and approve in one step, or do we need to do two separate steps?

Mr. DeVictor: I think normally what we get out of this group is, is this based upon the best available science. I think that, in de facto, approves it, so I think you just need to is this based upon available science.

Ms. Belcher: I just wasn't sure since they were broken as two separate things.

Dr. Barbieri: I move that the SSC endorses Amendment 15B as based on best available science.

Ms. Belcher: Do I have a second?

Mr. Chester: Yes, I'll second the motion to endorse Amendment 15B as based on best available science.

Ms. Belcher: Any further comments or discussion? Okay, we'll put it to a vote. All those in favor of the motion, please raise your hand; anyone opposed. The motion is passed. Moving on to the next agenda item, we have a status update from Kate Quigley on a limited access privilege program report.

Ms. Quigley: You have this document as one of your attachments. There are four attachments associated with this agenda item. You have received Attachment 17, which is the LAP Program Workgroup Report; Attachment 18, which is the report on a Tilefish Informal Survey that was conducted by council staff. You have Attachment 19, which is the tilefish presentation; and then you also have Attachment 20, which is just the outline of an amendment that is being developed in the Mid-Atlantic for tilefish there.

I'm going to start off by just reviewing with you the report of the Limited Access Privilege Program Exploratory Workgroup. The workgroup met last year nine times. This past March the LAP Program Exploratory Workgroup presented their final report to the LAP Committee. I'm just going to go over what is contained within this document. You've got this an attachment so I'm just going to let know what is in here.

In Section 1 is an introduction which talks about the appropriateness of LAPs for the snapper grouper commercial fishery. There were two focuses of the LAP Workgroup. One is the LAP Committee asked them to comment on the appropriateness of LAPs for the snapper grouper fishery; and then also asked the workgroup to develop what they would like an LAP Program to look like for the snapper grouper fishery if one was implemented.

What the LAP Workgroup did is they talked about the appropriateness of LAPPs and they outlined what they saw as conservation benefits, economic benefits, social benefits and also drawbacks – so conservation drawbacks, economic drawbacks and social drawbacks. On Page 4 what you'll see is a good summary of what the LAP Workgroup did.

At the end of it all, what we did is we asked the LAP Workgroup members to fill out a very simple, anonymous survey to tell us in general if they thought an LAP for the snapper grouper

fishery was a good idea or not. The survey was distributed to 12 people. Eleven people handed it in. Fifty-five percent or six people agreed with the statement that they saw “a strong potential in adopting an LAP Program for the snapper grouper fishery provided it is enforced, there is money to pay for it, and that there are tangible economic and conservation benefits resulting from it.”

Then two people or 18 percent disagreed with this statement and three people were undecided. There were some workgroup members who thought that they could probably benefit more under a trip limit system than under an LAP Program. There were also other people that opposed an LAP because of regional considerations, because of initial allocation, they saw it as inequitable for various reasons. Many of those are contained within this document, just in this introduction section.

Then we asked people if they agreed with the statement that the council should move forward with the development of alternatives for an LAP Program under an amendment to the Snapper Grouper FMP. Five people agreed with that; four people were undecided; and then two people disagreed. This report was brought to the LAP Committee in March, the LAP Committee decided at this point in time not to move ahead with an LAP Program because they did not feel that they got the support that they needed to be able to move forward.

The LAP Workgroup also tried to outline specific concerns that they had. One of them was they thought that if an LAP Program was going to be implemented, that they’ve got to have better science to produce TACs to track real changes in stock abundance. They also thought that in an initial allocation what they might need is for some sort of eligibility requirement that would eliminate some people within the fishery, such as an income requirement.

I’m just going over this very briefly. They also felt that no program, including LAPs, will be successful unless and until serious recreational accountability measures were put in place. Some LAP members were concerned with how transferability of quota share might impact regional landings and also the economies of local communities and culture that have been cultivated around the fishing industry.

Some LAP members felt that sector allocation as it is in the northeast U.S., cooperatives or regional fishing associations under an LAP might improve the economic viability of the fishery and that this was preferable to them than a full-scale LAP. Many LAP members asserted that they wanted to continue meeting, and they wanted the council, first, to take over where the LAP Workgroup have left on, and they wanted to continue meeting after March. That’s not occurring at this point in time.

In Section 2 the LAP Workgroup identified goals and objectives that they wanted to see met with the overall goal being to refine a system whereby profitability, efficiency, fairness and capacity of the commercial snapper grouper fishery are aligned with available yields from the South Atlantic Ecosystem and which contribute to conserving healthy stocks and/or rebuilding overfished stocks consistent with the Snapper Grouper FMP and the Magnuson-Stevens Act.

In Section 3 the workgroup put forward prerequisites for an LAP Workgroup-Supported LAP Program. These are things that the LAP Workgroup wanted the council to take note of and wanted to see enacted prior to implementation of an LAP, if an LAP were to be implemented. One of the primary things they wanted was a referendum and an industry-wide vote. They wanted to mail out some sort of survey that asked people do you want this LAP Program once there some details associated with it. If the majority of fishermen wanted it, then the LAP Program will go ahead. If they didn't want it, then they would not.

Now, in this section right here they talk about how the vote, though, could be weighted according to landings. They also comment on limited snapper grouper permits and what should be done with the limited snapper grouper permits and a couple of other items; the sale of recreationally caught fish; the two-for-one rule, the purchasing of two permits in order to have one permit functioning within the fishery; and allocation of TAC between commercial and recreational sectors.

Then in Section 4 they go through a number of different design characteristics and management options that they would like to see implemented or are not implemented in an LAP Program. This is a general overview of what they came up with and what occurred. But just to repeat, at this point in time the council has decided not to move forward with an LAP Program. Before moving on to a Tilefish-Type LAP that has been discussed, I can go ahead and take questions.

I guess I'll give you just an overview. For those of you who don't know, in March they decided not to move forward with a full-scale Snapper Grouper LAP, but they did direct the council staff to talk to tilefish fishermen and ask them if they would like to have an LAP implemented for that fishery as perhaps some sort of pilot program or something smaller scale than a Snapper Grouper LAP. First, I'll ask if there are any questions before going on to the tilefish presentation?

Okay, then I will move on. You have this presentation as part of your attachments. Council staff, again, was directed in March by the LAP Committee to contact tilefish fishermen and ask them how they felt about an LAP Program for the tilefish fishery specifically. Just to give people an overview of how the tilefish fishery is currently managed, the commercial quota is approximately 295,000 pounds.

There is a 4,000 pound trip limit until 75 percent of the commercial quota is met. After that, there is a 300 pound trip limit. There is a longline fleet and a hook-and-line fleet. The longline fleet fishes starting in January until the trip limit drops, and then they've told me that usually they drop out of the fishery at that point in time. The Florida Longline Fleet typically starts in winter.

Now, the fishery is open, of course, in January, but from my conversations with fishermen, the Florida Longline Fleet starts in winter. The North Carolina/South Carolina Longline Fleet starts around March and April, depending on weather. Then there is a hook-and-line fleet. The fishery is also open to the hook-and-line fleet starting in January, but typically what I was told by these fishermen is that they start fishing in September or October when other fisheries are closed.

This is the one slide that's not included in your attachment that you have of this presentation, so this is something that I've added. Here is a graph depicting average golden tilefish landings by individuals within the fishery from 1999 to 2006. These are average landings across that time period. On the Y-axis is the number of fishermen and on the X-axis is landings of tilefish average landings.

What this indicates is that there are four fishermen landing 30,000-plus pounds on average each year between 1999 and 2006. Four fishermen are fishing somewhere between 20,000 and 30,000 pounds of tilefish and so on up. What you see is there are very few people who are actually participating in the fishery and catching large amounts. Those people that are catching 30,000 pounds plus, 20 to 30,000 pounds, 10 to 20,000 pounds, those are longline fishermen. Then we've got 1,000 to 5000 and 5,000 to 10,000 pounds, those are hook-and-line fishermen.

The methodology I used as far as contacting tilefish fishermen was, first, I took a look at logbook landings. There are approximately 240 vessels that have caught at least one tilefish pound on average from 1999 to 2006. This was from logbook data. I spoke informally with fishermen with average logbook landings of golden tilefish of 500 pounds per year or greater. Remember that there is a 300 pound trip limit later on in the year once more than 75 percent of the quota has been caught, and this is the time when hook-and-line fishermen typically participate, so I chose 500 pounds.

That's when I saw a real big drop off in the participation rate. This turned out to be about 26 fishermen owning 33 vessels. The fishermen I spoke to landed on average 92 percent of the total catch of golden tilefish over the period of 1999 to 2006. There were a couple of people I was not able to reach, and that percentage would have been quite a bit higher. It would have been around 99 percent if I was able to contact those fishermen, those individuals, those one or two individuals that had landed quite a few pounds of fish over those years.

The owners of approximately 206 permits were not spoken to that did catch on average one tilefish pound or greater due to the inability to contact them because of expired permits or landings were below 500 pounds per year on average. Approximately 156 vessels landed less than 100 pounds per year on average.

The fishermen were provided background information on LAPs, basically just a very brief overview of what LAPs are if they didn't know what LAPs were. They previously had received information in the mail about LAPs. They also received from me an update on council consideration of LAPs. The fishermen were then asked if an LAP is something that they would like to use in the management of golden tilefish.

The fishermen that I spoke to that landed 500 pounds or greater, they were familiar with LAPs. They had received information from North Carolina Sea Grant about LAPs. They had done quite a bit of reading about LAPs so they were very familiar with what these types of systems entailed. We've also posted quite a bit of information on our website, and I've talked to a lot of these fishermen in the past. There was also outreach done by LAP Workgroup members.

I was presently surprised that a lot of these fishermen knew quite a bit about LAPs. They knew that this was coming; that I would be calling them; and they were ready to talk. Just a couple of regional characteristics; there were 18 longline fishermen and 15 hook and line that I spoke with. Three were from North Carolina; five, South Carolina; twenty-two, Florida; two, New York; and one New Jersey.

Just a note; not all fishermen contacted currently target golden tilefish. Many of them fished from 1999 to 2003 and then they didn't fish anymore. Several people were in and out of the fishery. However, all had average historical landings of 500 pounds or greater associated with their permit or permits. This is just a summary of the results. Looking at the group together, longline and hook and line, assuming one vote per vessel, 63.6 or 21 vessels were in favor of an LAP of some sort for the tilefish fishery. Twenty-one percent, seven vessels were opposed to an LAP; and 15 percent or five vessels were only in favor of an LAP if there was a new stock assessment done or they were only interested in sector allocations.

One person was interested in sector allocations. This is the type of program used in the northeast where a council assigns an allocation that could be fishable by a group of fishermen who separate off from the rest of the commercial fishery. We've got some presentations on that coming up tomorrow during the LAP Committee meeting.

Then if we go ahead and assume one vote per pound landed on average from 1999 to 2006, 61.6 percent of 21 vessels are in favor of an LAP; 21.9 percent opposed to an LAP; 16.5 percent only in favor under certain conditions. The difference between the one vote per person and one vote per pound landed is very slight, 63.6 percent compared to 61.6; a slight variation in the other numbers.

Now, if we split it out where we just take look at just the longliners, these are the people who harvest most of the commercial quota and the actual percentage that they harvest in 2006 was 92 percent; from 1999 to 2006 it ranged from 89 percent up to 94 percent, so taking the majority of the catch. If we look at one vote per vessel, it's 66.7 percent, 12 vessels in favor; two vessels opposed, that's 11 percent; and then 22 percent or four vessels wanted a new stock assessment.

One vote per pound landed on average from 1999 to 2006; 61.8 percent in favor; 21.5 percent opposed; 16.7 percent want a new stock assessment. Just to let people know – I'm sure most of you already know, but there is a stock assessment review planned for 2010 for tilefish. The reasons that the longliners gave for the way that they voted; those in favor, they wanted to see a longer season. They wanted to avoid the derby fishery that they agree exists, that brings lower prices.

They wanted to avoid bad weather in the winter months that they felt that they were forced to go out in. They wanted to be able to sell at restaurants, which they felt they could not do unless they had a year-round harvest coming in. They wanted to see family more. They needed to fish September-November and they weren't able to. South Carolina longliners felt like they weren't able to go out until April or even later because of the weather.

Sometimes during the year, in some years the 4,000 pound trip limit had already gone down to 300 pounds, and so they weren't able to go out at all or they were only able to go out for a short period of time. They were in favor of an LAP because it would spread the ability to go out fishing throughout the year or for a longer period of time.

Those who were opposed to an LAP that were longliners felt that the LAP would eliminate trip limits that benefit the hardest workers and the LAPs cap what individuals can catch without purchasing more quota.

The hook-and-line fishermen results; assuming one vote per vessel, 60 percent or nine vessels were in favor of an LAP; 33 percent or five vessels were opposed; and 6.7 percent or one vessel wanted a sector allocation type program. Assuming one vote per pound landed on average, 1999 to 2006, 61.7 percent were in favor; 25 percent were opposed; and 13.3 percent wanted a sector allocation program.

The reasons that they gave; those in favor felt that the LAP would allow them to fish before the longliners met the commercial quota and the season closed. They felt that an LAP would bring increased X-vessel prices and they needed to fish in September to November; and if the season closed before then they wouldn't be able to.

Those who were against an LAP felt the current trip limit of 300 pounds was just fine. They felt that they didn't like what they saw. They didn't like LAPs in the Gulf red snapper; what they saw from that program. They also felt that without increased enforcement, LAPs will not have conservation benefits.

These last two slides that I'm showing to the LAP Committee; this is just a comparison between the survey done for the tilefish group of fishermen and then the LAP Workgroup. This is just a review of what I just went over from the LAP document; the LAP Workgroup response to the statement that they saw a strong potential in adopting an LAP Program for the snapper grouper fishery was 55 percent agreeing, 18 percent disagree, 27 percent were undecided; then in response to the other statement that the council should move forward with an amendment, 46 percent agree, 18 percent disagree, 36 percent undecided. This is just to refresh people's minds of how the two compare. That's the end of that presentation. Are there any questions?

Dr. Crosson: I have two questions. The first is was there any geographical difference on how much support there was between the tilefish fishermen in Florida versus everybody else? The second is, is there any correlation, either positive or negative, with income level or at least the pounds landed among these guys, the highliners versus the ones that barely fit in underneath your criteria?

Ms. Quigley: To answer your first question, there was a difference. It was basically Florida – well, let me say the longliners in Florida were either against – several of them were against an LAP or they wanted an LAP under conditions. There were some, though, in Florida who were in favor of an LAP, but everyone I spoke to in North Carolina and South Carolina was in favor of

an LAP for tilefish because they wanted to be able to fish for a longer period of time than they were getting to fish in the past few years.

Some past few years the fishery has gone from 4,000 pounds down to a 300 pound trip limit early on in the year or early enough so that they felt that they wanted to fish for longer. Their fear was that in the coming years the fishery was going to close in March or April or May and that those longliners would not get to fish their 4,000 pound trip limit for very long. Those people in North Carolina and South Carolina were in favor of an LAP; the longliners were in favor of an LAP, unanimously.

In Florida there were some people in favor or some people against and some people undecided. To answer your second question, those longliners with the largest catches were against an LAP. They felt that the initial allocation that they would receive under an LAP was not as large as what they can get under a trip limit, under a current trip limit. I ran their numbers through an LAP initial allocation model that we have and had conversations with them about that and the results that it provided, and that was true.

What they are catching now is smaller than what they would receive through an initial allocation if you used the methodology of average landings from 1999 to 2006. Now, if you used something else such as the best of three, which was talked about by the LAP Workgroup, or you had some income eligibility, those results could change. But just using an average of 1999 to 2006, the people who disagreed with an LAP, who did not want an LAP that were longliners, they benefited more under the current trip limit system.

The hook-and-line guys, the people that disagreed, did not want an LAP. The large-scale hook-and-line people who were bringing in large amounts of tilefish who were hook and line wanted an LAP. The people who were not currently fishing that were hook-and-line fishermen did not want an LAP because they wanted to get back into the fishery, but they didn't have much historical landings, so they wanted to have the trip limit system in place when they re-entered, so that they could fish and bring up those landings. People were all over the place.

Then there were the New York/New Jersey people who hadn't fished for several years, but they had very significant historical landings. They were in favor of an LAP because they had seen it work. They had seen what had been developed in the Mid-Atlantic and they were in favor of it. They have participated in other LAP Programs or IFQ systems, and they felt that would work for them, so they were in favor of it.

There were longliners that weren't fishing at all; they were in favor of it. In South Carolina and North Carolina there were some people that haven't been able to fish at all for various reasons not having to do with the fishery closing early. They were also in favor of it. There were people all over the place. Does that answer your question?

Dr. Whitehead: In the Gulf Red Snapper vote, what level of support was required to implement that; do you recall?

Ms. Quigley: I believe two-thirds – if you did a referendum, I believe two-thirds is required, and, of course, there is no requirement here in the South Atlantic.

Dr. Whitehead: So that was required for the Gulf, but there is no requirement here?

Ms. Quigley: I'm trying to remember. I think the Gulf Red Snapper – Sherry, do you remember if the Gulf Red Snapper was implemented before the new MSA requirements came into place? I know that there is a two-thirds requirement at least for the Gulf Grouper IFQ. Red snapper I believe might have gotten into place before the MSA requirements. I can't remember, but it's a two-thirds requirement.

Dr. Whitehead: So, when you present this to the LAP Committee they will discuss and recommend, so what sort of recommendation are they moving towards or thinking about?

Ms. Quigley: The council staff will be reminding the LAP Committee that they had had a discussion in March about the possibility of forming a workgroup of tilefish fishermen to discuss an LAP for the tilefish fishery and to hash out some sort of design mechanism if the tilefish fishermen were in favor of it. The LAP Committee will have to have a discussion about whether there is enough support or if they want to go ahead with forming some sort of Tilefish LAP Workgroup or if they would like council staff to begin drafting an amendment or not.

Dr. Whitehead: So the tilefish folks will go through a 70-some page effort to help design an LAP if it gets that far down the road?

Ms. Quigley: That's one idea. There was some discussion in March about how it might not take as long for the tilefish fishermen to have this sort of discussion or workgroup process as it did for the snapper grouper fishermen. A lot of the background information has already been gathered, people have received some sort of education about LAPs, major outreach has already been done, so a lot of those things have already been gone through. There is a feeling that it might not take as long, but, yes, I would assume they would produce some sort of document.

Dr. Larkin: I have a few questions about some of the reasoning behind some of the opposition. I mean, there were three that I'd don't really understand. One is the people that work the hardest the trip limits benefit those that now work the hardest. The other was they were concerned about what they had seen in snapper, and the other was the ones who wanted to wait for the next assessment. Is there any reasoning about what they hope to see in that assessment that might help explain their opposition?

Ms. Quigley: Sure, I'll talk about the stock assessment first. There is one individual who felt like he was in favor of an LAP if only the commercial quota was a little bit higher. He felt that a new stock assessment or an update of the current stock assessment would yield a slightly higher commercial quota. All the fishermen I have been speaking to have reported large numbers of tilefish and large tilefish, just all age ranges, all sizes and lengths, so that they felt that the stock looked fairly healthy, and so they felt that there would be an increase in the commercial quota if a new stock assessment was done.

That was the reasoning behind that; however, this person didn't feel like he could go ahead with an LAP under the current commercial quota and be just as successful as under the trip limit management system. Speaking to the opposition that mentioned that an LAP Program would eliminate trip limits that currently benefit the hardest workers under the current system, the trip limits, his assumption was, if it was under an LAP, those trip limits would be eliminated.

He felt that under the current system, when you have a trip limit, you can go out as many as times as you want and that those are the people who bring in the highest landings, so the system benefits those people bringing in the highest landings; and that under an LAP, that he would be capped, and that there is nothing you can do to increase your landings other than to purchase more quota, so that was the reasoning in that.

Then I believe it was a hook-and-line fisherman who stated that they didn't like what they saw coming out of Gulf Red Snapper, an LAP, and what he mentioned was in the initial allocation some people received three pounds. They didn't like their initial allocation. That was the thing that he saw that he didn't like about the Gulf Red Snapper was the initial allocation.

Another thing that he mentioned was that at the same time the initial allocation was done there were also cuts in the TAC for Gulf red snapper; and the fact that those two things happened at the same time, a lot of fishermen, I think, have had difficulty separating those two things out; a cut happening at the same time as an LAP, and I think some of them thought the cuts in the TAC was associated with the LAP.

Ms. Belcher: Any further questions or discussion for Kate? Okay, with that, what I'm going to do, because already running behind, I'm going to go ahead and suggest that we do the break the now, but we're only going to do it for 15 minutes instead of the 30 that's in there, just so that we can get a little bit more caught up. When we come back, we'll start with the Snapper Grouper Amendment 16.

Ms. Belcher: Let's go ahead and get restarted. I've had a request for Marcel Reichert that back to Gregg's request relative to the bycatch monitoring and the ACCSP; I guess the language within that. Marcel and a few other folks have actually come up with something that they feel would make a good motion that Gregg might find useful for that particular part. Marcel will go ahead and work out the language for that. I think this is an action for you, Gregg, for that suggestion from us relative to the monitoring of bycatch.

Mr. Waugh: It was Page 201.

Dr. Reichert: I think the issue was Option Number 2. I feel that Option 3 or maybe even Option 4 basically on the statistical merits would be a better option. I think we realize the political reality, but I feel that based on statistical merit maybe we should recommend Option 3 or Option 4 as a preferred option as an SSC.

Ms. Belcher: Further discussion from the rest of the group on that? Marcel said that they were talking about it at the break, so I'd kind of like to hear some more of the dialogue from the other supporters. Erik.

Dr. Williams: Yes, we were talking about this, and I think, as Marcel said, the political reality is that the ACCSP stuff is not going to get funded, but I think we can make a clear statement from a science standpoint that it is better to be collecting this bycatch information, and I think we should make that statement.

I think the different between three and four is – I don't know if there is much difference. One is the ACCSP protocol; the other is just require that we get the proper coverage. I would say probably Alternative 3 is better. That actually has – I believe the ACCSP protocol spells out percentage coverage and all of that sort of stuff so it's a fairly well laid out sampling protocol.

Ms. Belcher: So could we have one of you guys draft a motion for that and we'll put it up on the screen?

Dr. Reichert: I make a motion that the SSC suggests to make Alternative 3 the preferred alternative.

Dr. Williams: Should we put in Amendment 15B in that statement somewhere?

Dr. Reichert: And I think we should also put in that this refers to the monitoring and assessing of bycatch.

Mr. Carmichael: Does anyone here know what the ACCSP standards are and that's what specific type of coverage and information you would be supporting in this motion?

Dr. Williams: I don't know the exact specifics. I remember looking at it and I've talked with several people that the percent coverage seems reasonable. It corresponds to percent coverages that are used in other fisheries across the country. I think it's like 5 to 10 percent observer coverage and things like that.

Mr. Carmichael: I just pulled up their website. Here is just a quote about what they say, and it's not exactly what I expected either.

Mr. Waugh: John, excuse me one second. We don't need to use the website; it's in 15B.

Mr. Carmichael: Is it the actual amount?

Mr. Waugh: I'll give you the page number.

Mr. Carmichael: Do you know what the percentages are? I guess that's question; is it 10 percent, 5 percent, because here it says it's like 2 percent for their non-priorities, so I'm just wondering if that's what people think is enough?

Mr. DeVictor: In Amendment 15, if you will all turn to Page 4-47, there is a table in there that species the ACCSP requirements and to what degree they are fulfilled by the current bycatch measures. Again, that's Page 4-47.

Mr. Waugh: And I might just remind everybody, all three east coast councils, every east coast state, the National Marine Fisheries Service, the Fish and Wildlife Service, and I think it's the District of Columbia have all adopted this as the preferred methodology for collecting bycatch and monitoring bycatch.

Ms. Belcher: Andy, do you have a further comment or would you like to second? Do we have a second for this?

Dr. Williams: I second the motion.

Ms. Belcher: Okay, open to further discussion. Andy.

Dr. Cooper: Yes, ACCSP will do a better sampling job. My fear is that if we're going to be requiring funding, you know, we have to also decide scientifically resources to be shuffled around. We don't know what will get cut. Will we actually be better off by improving bycatch sampling through ACCSP versus how money is currently spent?

We're going to lose samples of something else somewhere, and so I'd be worried about phrasing something like this as opposed to simply saying Alternative 3 will give you better information and we would prefer it, but acknowledge the fact that if we do require funding of ACCSP then we may end up suffering by loss of other surveys, loss of other – I mean, I'd be worried about making a blanket statement saying that this is the best use of money, which is essentially what we'd be saying; as opposed the current alternative is ACCSP is preferred, we'll use when we can, and we'll keep doing what we are now rather than making essentially a budgetary decision that ACCSP should be funded at the expense of other things.

Dr. Reichert: I appreciate your reasoning. I don't think we are making a budgetary statement. I think we are making a statement that this alternative will provide the best scientific data.

Dr. Cooper: That's not what the motion says. The motion says the preferred alternative – and we Gregg already on record saying that Alternative 3 would require the funding. I think saying that is our scientifically preferred alternative versus just confirming number three will provide the best available data for estimating bycatch are two different things. I would be very happy to support a motion that says number three provides the best available science without necessarily saying that's our preferred alternative.

Dr. Reichert: I agree and maybe we can change the language of the motion to that effect.

Dr. Williams: I concur with the changes to the motion.

Ms. Belcher: Marcel, you've got to accept that as well.

Dr. Reichert: Yes, I do.

Ms. Belcher: Any further discussion or comments on the motion? Marcel, if you wouldn't mind reading it.

Dr. Reichert: The SSC suggests Alternative 3 reflects the best available science for monitoring bycatch in Snapper Grouper Amendment 15B.

Ms. Belcher: I'll put it to a vote. All those in favor of the motion as is, please raise your hand; any objection. The motion passes. All right, with that, we'll pick up on the agenda item relative to Snapper Grouper Amendment 16. We have a status update from Gregg Waugh, and then Jack McGovern is going to discuss the post quota bycatch analysis with us.

Mr. Waugh: What I was going to do was run through very quickly the public hearing presentation and then get some economic input from Kate and Stephen. This presentation is included under the Snapper Grouper Committee materials. It's Attachment 14, and I'll go through this quickly. If you all have questions, please stop me as I'm going through.

We're responding to the stock assessments for gag and vermilion snapper. I'm not going to touch on the red snapper stuff. I'll hit that when we get to 18. We're updating management reference points, interim allocations and regulations to end overfishing. Here it's just showing a trend in landings. The top line is the commercial fishery; the middle line is the MRFSS; headboat on the bottom.

In terms of MSY – and these are all recommendations you all have given us in the past – 1.238 million pounds; OY, 1.27. The status is that we are not overfished. The minimum stock size threshold is 6.8 million pounds. The spawning stock biomass in 2005 is 7.5. That ratio is above 1; it's 1.096. However, we are overfishing. The maximum fishing mortality threshold is .0237. F in '04 was estimated at 0.31 so that overfishing ratio is 1.309, so we have to end that overfishing.

The SSC has previously given us an estimate of OY as being the yield at 75 percent of FMSY. That translates into a TAC of 694,000 pounds gutted weight. The council thus far is recommending that stay fixed until we get the next stock assessment update in 2011. In terms of allocations the preferred alternative is to allocate 51 percent commercial/49 percent recreational. Our AP recommended 50/50. That comes the closest to it.

That's based on the actual landings by those two sectors' average landings over the years '99 through 2003. So if you take that 694,000 – and these tables are included in the document, but I just want to show you how we get our percent reduction. The catch level that we're specifying is 694,000 pounds. The preferred alternative is to allocate 354,000 pounds to commercial. Their average landings from '04 to '06 were 547,000 pounds; so to reduce them from 547,000 to 354,000 is a 35 percent reduction.

Similarly, on the recreational side their average landings over '04 to '06 were 541,000 pounds. We need to reduce them to 340,000; that's a 37 percent reduction. So how do we go about getting that on the commercial side? Again, we're looking for a 35 percent reduction. Current regulations are 24-inch size limit; March-April, no sale, and bag limit. Everybody is limited to the bag limit.

We're proposing a January through April spawning closure. This would achieve on the commercial side a 20 percent reduction. However, we're getting the full 35 percent reduction by putting in a quota on the commercial side. We've got a directed quota after deducting the post quota bycatch mortality – I'm going to turn it over to Jack in one second to explain that post quota bycatch mortality to you – that's our preferred.

There is an alternative in there that would divide that directed commercial quota between two areas, North Carolina and South Carolina versus Georgia and Florida, and you can see the percentage is 63.3 percent to North Carolina and South Carolina, and this is based on the '99 through '05 commercial landings. There was a lot of support during the public hearings for either state- by-state quotas or a regional quota. The council will be considering those public comments. Jack, if you want to touch on the post quota bycatch mortality.

Dr. McGovern: I'm not going to go into the detailed methodology for post quota bycatch mortality because I presented that to the SSC at the December meeting and they approved the methodology. I know there are some new people on the SSC that might not know what post quota bycatch mortality is so I'll talk about it a little bit.

Post quota bycatch mortality is a term that the SSC came up with back when Jim Berkson was the chair. It came about because of the reduced harvest that 13C was requiring. The SSC at that time said with these reduced harvests, there is a chance that the quota could end early and there could be increased discards that were not accounted for in the assessments.

We needed, when we looked at reductions, to account for these increased discards that could occur after a quota is met, and they called this PQBM. Actually, post quota bycatch mortality is not just dead discards that could occur after a quota is met. It's increased discards that could occur during a seasonal closure or associated with a reduced trip limit or bag and size limit analysis, so PQBM is more than just dead discards after a quota.

Last September the council asked that we come up with some kind of methodology for estimating PQBM for vermilion snapper and gag for Amendment 16. I presented this to the SSC in December. The SSC approved the methodology. Basically, for those you who are not familiar with it, the methodology is what we want to see is what are the discards that could occur during a closure or after a quota is met when there is no targeting of gag or vermilion snapper, what incidental catch would there be.

So what I do is look at the co-occurring species, the major co-occurring species, and restrict the trips to those co-occurring species and then figure out what incidental catch of those species

would occur and then apply release mortality to that, and that give the dead discards during a closure. Then you can look at the effectiveness of a closure or the dead discards after a quota is met. Then those dead discards, after a quota is met, is used to adjust the quota. That's briefly what the methodology is.

When I presented the methodology to the SSC, there were two questions that remain. The two questions were with gag or vermilion snapper – these are species that are very much sought after by commercial and recreational fishermen – what percent of trips, what reduction in effort would there be after a quota is met or when there was some sort of seasonal closure; and, also, what ability do fishermen have to avoid vermilion snapper or a gag by changing gear or avoiding locations where they occur?

The SSC said they really can't recommend anything on that and the council couldn't either, and so both the council and the SSC recommended that I contact the Snapper Advisory Panel. In January I put together a summary of the methodology for post quota bycatch mortality and I sent it to all the AP members. What I sent to the AP members was also a form so they could easily fill out the reduction in percentage of trips and reduction in effort they thought that might occur during a closure and also the ability of fishermen to avoid vermilion snapper or gag.

I got five responses from fishermen. All the responses were anonymous. Two of the fishermen indicated that they thought there would be reduction in commercial trips during a closure, after a quota is met or during a seasonal closure, and they thought there would be some ability of fishermen to avoid either gag or vermilion snapper by a change in behavior such as changing gear or location where the fish occur, but they didn't provide any specific values that could be used.

Another fisherman stated that he didn't there would be any effort reduction in diving, but there is a hundred percent ability of a diver to avoid gag or vermilion snapper. Another fisherman indicated that recreational effort wouldn't decrease, but there is an ability of recreational fishermen to avoid gag and vermilion snapper to some degree by changing gear and location.

Another fisherman indicated that any kind of recreational closure for vermilion snapper would be pretty devastating and that as much as an 80 percent reduction in trips could occur, and that he thought there would be some ability of fishermen to avoid vermilion snapper through the use of circle hooks, which are being proposed in Amendment 16, and other gear modifications.

The conclusion was that all responses indicated generally that there would be some kind of effort reduction for a seasonal closure or after a quota was met and that fishermen could avoid vermilion snapper or gag to some degree. Let's assume now in Amendment 16 is that 20 percent of the trips during a seasonal closure would not occur, so there would be a reduction in effort and that there also would be a 20 ability of fishermen to avoid vermilion snapper or gag, and so that's what we have in there now. Any questions?

Dr. Cooper: If you discussed this in December, I'm sorry I missed it; and it's already been approved, so maybe this wasn't part of the topic. In reading through the document, it says that

you took out trips whenever the opportunity costs exceeded net revenue; and, my question about that is that assumes perfect knowledge of the fishermen and they won't make that same mistake that they obviously made before; that before they did take a trip where opportunity costs exceeded the net revenue; so why are we assuming that they're not going to do that in the future, and does assumption actually change the numbers at all?

Dr. McGovern: I used a model that was provided by Jim Waters, and he accounts for inflation and things like that in there and the price of gas, and so I think it assumes that the costs would increase in the future and that these trips would be dropped because of increasing costs. Maybe Stephen can talk more about it, but Jim Waters provided me that model and that was the opportunity cost that was built into it.

Dr. Holiman: No, I don't have anything to add to that.

Dr. Cooper: Any idea how sensitive your numbers are to that assumption and do any of the economists want to jump in as to whether or not this is an important topic or am I just spinning my wheels?

Dr. McGovern: I can comment that it didn't drop a whole lot of trips. I don't think it would have made much difference for these two species if I had not included that factor.

Ms. Belcher: Anyone else have questions for Jack? Okay, with that, Gregg.

Mr. Waugh: Okay, where that leaves us is we specify a directed commercial quota after deducting the estimate of post quota bycatch mortality of a thousand pounds, and so that give us a directed commercial quota of 352,940 pounds. In terms of the impacts, I'm going to let Kate and Stephen address this. We've got in here two estimates based on a 3 percent and a 7 percent discount rate, so I'm going to let them comment to this.

Dr. Holiman: I guess I'll go ahead on and start on this. First, the status of this analysis right now is, obviously, it was out for public hearing during that period of time the document was also submitted to the Southeast Fishery Science Center for editorial review. Dr. Lamberti, who did this analysis, is going through those comments and making editorial revisions to the document. One of the comments had to do with the use of discount rates here in these particular tables and stuff and the appropriateness of the use of the discount rates, and that's being addressed right now.

There was some confusion as to what was generated being the net present value of a stream of impacts or whether the impacts as generated by Dr. Waters' model were single-year impacts. It was clarified that, in fact, they were single-year impacts and therefore the use of the different discounts rates was not necessary at that point in time, and so those editorial changes are being made right now.

My expectation is that in response to making that adjustment, while the numbers themselves will change somewhat, it should not affect the ordering of the results in any way, shape or form. Any

questions on that? In general, I went through the review comments that we got through the science center, and, like I say, it's mostly just editorial stuff. I didn't detect anything that's going to result in any significant changes in the quantitative results. It's just editorial sorts of stuff.

Mr. Waugh: Thank you. What this shows is that in terms of the impacts of our quota and spawning season closure in terms of reductions in commercial vessels' net operating revenue, we're looking at a 20 percent reduction. You can see how that changes over different gear types. Now, another way of looking at these impacts is by area. Again, if we look at this, Alternative 3aS is a single quota with a spawning season closure; again, an overall 20 percent reduction.

But you can see the impacts to North Carolina are 12.7; 18 percent, South Carolina; 25, Georgia and Northeast Florida; 34.5 percent, Central and South Florida; and 38.8 percent in the Keys. We heard a lot that in the Keys they catch very little gag. This impact comes from the associated closure on shallow water groupers that catches black grouper down there.

Then on the recreational side, again, we're going after a 37 percent reduction. The regulations that are in place now are 24-inch total length, five grouper aggregate bag limit with two gag or black; March-April, there is no sale. The preferred alternative is to parallel the commercial so that we'll have a total spawning season closure January through April. On the recreational side that gets you a 31 percent reduction.

We need 37, so reducing the aggregate grouper bag limit from five to three and the gag or black from two to one, excluding captain and crew, gets you an additional 5 percent reduction and gets up to a 36 percent total reduction, which is very close to the 37 percent needed. That's the council's preferred alternative.

Again, in terms of impacts here, preferreds are Alternative 2 and 5a, and you can see the impacts here on the order of Alternative 2 which is the closure on the order of a million dollars, and you can see how that varies across charter, headboat, private recreational, fairly even; and then the changes in the bag limits, about 1.3 million.

Again by area, looking at Alternative 2, you can see that of the total impact from that closure a little over a million dollars, the bulk of the impact is in Florida, and that's where the bulk of the gag catches are coming during that time period. 5a, the total impacts that change in the bag limit, 1.4 million, and, again, the bulk of that impact coming in Florida. That's it for gag. Any questions before I move on to vermilion?

Dr. Williams: Gregg, you mentioned that some of the impacts, particularly in the Keys, included the closure of the shallow water grouper. Is that in Amendment 16 or is that Amendment 17?

Mr. Waugh: That's in Amendment 16. During that spawning season closure and when the quota is met, we are prohibiting any harvest or retention of the shallow water grouper species in Amendment 16. That's gotten a lot of comment; again, particularly in the Keys. The rationale is to provide some additional protection for gag when that spawning season closure and/or the quota is met, and also that a number of those other species are listed as undergoing overfishing.

We know more restrictive regulations are coming and this takes a step in that direction in Amendment 16.

Okay, vermilion, again, commercial landings on the top, and here headboats are higher landings than the MRFSS. There is a little bit of a twist here in that legally the council is required to propose measures based on the existing vermilion assessment. There is another assessment being done, an age-based assessment, that we will have the results at our December meeting. What the council has put in here is a measure to all the NMFS Regional Administrator to make adjustments to the management measures based on the results on this new stock assessment.

Amendment 16 will have the measures based on the existing stock assessment, but once the results become available and before those regulations take place, we will have the results of the new stock assessment. You all will review that at the December meeting. Then what regulations will ultimately be implemented would be based on that new stock assessment. For instance, if the new stock assessment said we need a 30 percent reduction, then the size limit would stay the same, the bag limit would go down to nine, and we would not have a closure.

What the council has done is constructed a table showing that if you round off the percent reduction from the new stock assessment to the nearest 10 percent, then you go into this table and you see what regulations will be implemented. For the commercial we've got a table in there that shows what the various quotas are, and I'll get into how these time periods are split up, but it specifies what the directed quota would be based on whatever percent reduction is required from the new stock assessment.

We put this up front to try and help us get through the public hearings with those high vermilion reductions, and to some extent it helped address people's concerns. Based on the existing stock assessment that you have previously approved, the MSY is about 2.4 million pounds. Right now the optimum yield is estimated at a little over half a million. The overfishing ratio is 2.05, so we've got some fairly severe overfishing going on.

The benchmark assessment was done back in 2003. That overfishing ratio is 1.71, so we've got even more overfishing as of 2006 then we did as of 2003. The TAC that the council is proposing is 566,000 pounds. I discussed that new stock assessment that's coming, and this is based on the yield at 75 percent of FMSY.

The allocation here, we looked at landings from '86 through 2005, and that comes out to 68 percent commercial/32 percent recreational, and that's what is being proposed. Again, this table shows you have your commercial quota of 385,000 pounds. If you compare that to the average '04 to '06, the landings were 925,000 pounds, so that's a 58 percent commercial reduction that we need.

If you look at the recreational allocation of 181,000 pounds, their average landings from '04 to '06 were about 580,000 pounds, so that's a 69 percent reduction on the recreational side. How do we go about getting that? The existing commercial regulations are 12-inch size limit and a commercial quota 1.1 million pounds. After deducting the post quota bycatch mortality, we get a

directed quota of 328,002 pounds. We are proposing, under Alternative 3a, to split this, given that this is so low, to try and distribute this throughout the year.

Splitting it January through June, 50 percent of the quota would take place there; and the remainder of the year another 50 percent. These numbers are not exactly the same because the adjustments for post quota bycatch mortality in those two time periods are different. We have got other alternatives that would split it differently, but that's the council's proposal at this stage.

Based on impacts here, again, Alternatives 2 and 3a are the preferred so you can see we're getting on the order of a 61 percent reduction, and you can see how those are distributed across the various gear types. The same thing by area, you can see that the impacts are higher in North Carolina and South Carolina; a little bit lower in Florida.

On the recreational side, again, we're going after a 69 percent reduction. The existing regulations are a 12-inch size limit and a ten-fish bag limit. The preferred alternative now is to keep the size limit; reduce the bag limit to four; and have a closure October through May 15th. This is estimated to give us a total reduction of 66 percent, which is below the 69 percent. The council will have to determine if that's close enough or whether we need to modify that regulation.

In terms of impacts, 4d is the preferred, so you're looking at about 2.7 million pounds, and here the headboat takes the bulk of that hit at \$1.9 million. In terms of by area, 4d, total impact is 2.7. You can see that Florida takes the bulk of the hit there at about \$2 million. The additional measure that we have in there is to reduce bycatch of snapper grouper species. The council's preferred alternative for both the commercial and recreational snapper grouper fisheries is to require use of venting and dehooking tools and use of non-offset, non-stainless steel circle hooks when using natural baits for snapper grouper species.

We're proposing to track the verbiage that was approved and will be implemented very soon in the Gulf. That's it. The remaining schedule is we were notified last June that gag and vermilion were undergoing overfishing; so under the Magnuson at that time, we had a year to complete an amendment, and this June is that year. We are attempting to approve that at this meeting. We've had public hearings. We've gotten all the public hearing comments.

That has been provided to the council. Videos of all the public hearings have been provided to the council. You all have those comments as well, so we're looking for your review and comments on this. The council does intend, if they can, to approve this at this meeting.

Ms. Belcher: Any questions or comments for Gregg at this time? Gregg.

Mr. Gregory: On the dehooking, circle hooks and venting tool requirements, read carefully how the regulations are written for the Gulf and Florida, because they need to be improved in their specificity. They refer to things like alligator pliers that nobody seems to know what they are. They refer to using blunt pliers, which, in my mind, implies, well, needle-nosed pliers are not allowed as a dehooking tool, but that's what everybody uses, but when you inquire verbally from

the different agencies, they say, “Oh, needle-nosed pliers are fine.” I think that needs to be done carefully.

The way that the regulations are written now, it implies a preference for one brand of dehooking tool. For instance, is it necessary to specify that the dehooking tool should somehow prevent the rehooking of the hook as you’re removing it from the mouth? I’ve never noticed anybody having a problem with that even with needle-nosed pliers, which doesn’t really cover the entire span of the hook.

My impression is now, from the Gulf and the state of Florida, in talking with the FWC and the National Marine Fisheries Service, needle-nosed pliers are an allowed dehooking tool; but the way the regulations are written it implies otherwise. The other thing on the venting tool, the venting tool specifies a certain diameter hollow-pointed needle. That particular diameter is only available from the Sea Grant syringe that was developed by Florida Sea Grant and is now marketed by one company.

I think that’s too specific. I think if the regulation is written so that the whole or the hollowness – the size of the hollowed point is appropriate to the size of the fish. I know it’s more subjective but I don’t think we should be writing regulations that specify a particular company’s brand or model. Those are my two main concerns, the way the dehooking regulation is written and the way the venting tool regulation is written.

I think on the circle hook, the only question that has come up now is it doesn’t allow natural bait with J-hooks. That includes jigs. One thing to look at is there are no circle hook jigs on the market. All jigs are J-hooks. From talking with a company out of North Carolina that manufactures Calcutta – I forgot the name of the company, but they said that in South Florida there is a tendency to use natural bait with jigs. I’m just offering that as information. Elsewhere people use jigs usually without natural bait.

So, obviously, the market is trying to adjust and they’re going to be making, I guess, circle hook jigs. That’s the only thing with the circle hooks in general. I know you’ve had some testimony from the Keys about the use of circle hooks with yellowtail snapper and gray snapper where the fish is chummed up behind the boat, on the surface or near the surface, and problems associated with that.

I think that warrants probably a study or some sort of phase-in to evaluate whether circle hooks are that effective with those species. I know they are effective with the species that have been studied, and my experience is they’re very effective with groupers when you’re fishing on the bottom.

Dr. Williams: My concern about this particular item that probably mirrors a little bit what Doug said, too, I know we have studies that show that venting reduces release mortality and that circle hooks reduce gut-hooking potentially, but the thing I haven’t seen yet, and maybe it’s been done, is a measure of whether once these tools are thrown out there to the general public how effective they become, especially with regards to circle hooks.

I know a lot of anglers have trouble getting those out of the fish and they end up with more handling time which can be equally traumatic to the fish just trying to remove a circle hook versus a J-hook. Maybe somebody can speak to that, but my concern is that we're basing these tools on studies that were under ideal conditions or people who knew exactly what they were doing. At least that's my understanding, and, please, somebody correct me if I'm wrong.

Ms. Belcher: Comments to that point? Jeff.

Dr. Buckel: Erik, I don't know of any studies that have looked at the dehooking time with circle hooks, but it certainly can take longer and that could be an issue. Another issue with the circle hooks, the manufacturers of circle hooks have started increasing the gap width, and right now I think the definition is such that the point has to be perpendicular to the shank, and that's it, but opening up the gap width reduces the effectiveness.

Those hooks will gut-hook a lot more than the traditional circle hook that had a smaller gap. There may be a need to have some language somehow with that gap width. I think the Billfish Foundation has a document out that looks at the angle of that hook. I'm not sure how that works, but there is definitely some thought that needs to be put into that instead of just copying that language from the Gulf of Mexico. I agree with that.

Mr. Gregory: Were there any estimates of what the bycatch mortality – how it would be reduced given this regulation of dehooking, venting and circle hooks, because these will have positive impacts on the survivability of released fish?

Mr. Waugh: There is no quantitative estimate in there across the fishery. It's more recognized – and Jack can correct me if I'm wrong, but it's more recognized that this is a step in the right direction.

Dr. McGovern: I don't know of any quantitative estimates.

Mr. Gregory: Well, look at some data from Moat Marine Lab. They've been doing a lot of tag-and-release data for groupers and snappers throughout the Gulf and also on the east coast, including Cape Canaveral. I think they have differences in survival rates of the two types of hooks, so that's one thing. I don't know of anybody that's looked – and also venting; they have venting information as well. If that can be incorporated in Amendment 16, that might help the quota situation a little bit.

Ms. Belcher: Anyone else for discussion or comment? Gregg, you're done?

Mr. Waugh: Yes, we're finished; we're just looking for anymore comments and then ultimately your approval or disapproval.

Ms. Belcher: Doug Gregory has asked to present some information relative to the Keys that is additional information relative to, I guess, the impacts.

Mr. Gregory: I'll try to be brief. Amendment 16 seems to be a sledgehammer to drive in a finishing nail. There are very few options to accomplish what appears to be a major goal of reducing fishing mortality by 37 percent. I didn't find any discussion of the impact of trip limits on the commercial fishery; the impact of closing the fishery at different times of the year. I think their major fishery is in the summertime.

In the Florida the major fishery, because of tourism, is in the wintertime, so a January through April closure as the only closure that's been looked at could have a disproportionate impact regionally. I have a question for Gregg. Are regional quotas being implemented or was that simply a discussion?

Mr. Waugh: That is one of the alternatives there. That's not the preferred. The committee had discussions about state-by-state quotas, but there is an alternative in there that is analyzed that would divide the gag quota into two areas, North and South Carolina and then Georgia and Florida. That is in there fully analyzed.

Mr. Gregory: Okay, the point I'm going to try to make with this, I think we need to go toward regional management. The analyses in this document are a step in that direction, looking at the impacts on the different states and even in one document separating out the Florida Keys impacts where they estimated the impacts in the Florida Keys was 38 percent of the revenue from the snapper grouper fishery that had the major impact.

But, in reference to, I guess, the completeness of the document I would like to have seen regional seasonal closures and their relative impacts. In the socio-economic area, when you go to look, like I did for the Florida Keys, you see the community of Marathon evaluated when in reality there is at least five different communities that are available for the council to put in Amendment 16, and I think they can do this fairly easy.

In reference to a document written by the South Atlantic Council earlier this decade, "Potential Fishery Communities in the Carolinas, Georgia and Florida, An Effort in Baseline Profiling and Mapping", if this was stuck in all of the amendments, where appropriate, I think it would make the socio-economic evaluation a little more complete. For instance, in North Carolina, in Amendment 16 they include six of the twenty-two communities in North Carolina.

In Florida they include two of the sixteen communities that have been identified in Florida. One of those was Marathon, and Marathon doesn't really represent the Florida Keys fishing community at all. It's just one component. I have a concern about completeness of Amendment 16 in general as to how thoroughly alternatives have been considered to try to get the fishing mortality reduced by 37 percent.

Now, more specifically for the issue of regional management, I'll just start with this graph that's in Amendment 16 and look at the Continental Shelf, how it's more narrow off North Carolina; it broadens out over South Carolina, Georgia and North Florida; and then around Fort Pierce or in that area it becomes really narrow and down to the Florida Keys.

In South Florida most of the fishing for species recreational and commercial, as I said earlier for snowy, is close to shore or inshore relative to the other states. It might be worth looking at regional management for the geographic or fishable regions in general. The other thing I wanted to show was in the document of Amendment 16, Table 3-8, it looks at regional distributions of catches by species, and this table is that data alone.

It shows that in Central and South Florida 28 percent of all the shallow water grouper species are gag; North Carolina, 24 percent; South Carolina, 30; Georgia/North Florida, 38. It looks like things are kind in the ballpark with Florida and North Carolina being a little lower in percent of gag harvest. But if you look at the table right above, this table up here, and if you just look at Florida Keys data – and this particular is from the FWC data base that they have on their web – and this could include Gulf landings, so it's conservative, but it shows that the Florida Keys catches only 1 percent of the total gag in the South Atlantic area; and the Florida Keys, which is one county, 150-mile region, catches 32 percent of all the other shallow water grouper.

Now, to look at this in a different way or another point is this is the FWC date, looking at Monroe County landings, in Monroe County over 90 percent of the harvest is red and blacks – these are commercial data – and 1 percent or less are gag. The table at the top here is a table of permits. Now this came from an older document – I think the document I just referenced – and I couldn't find this data in Amendment 16, but if we're looking at distributional impacts of management – and I'm just looking at the Florida Keys here – the Florida Keys alone possesses 36 percent of all the snapper grouper permits that have been issued at that point in time.

Now, I haven't had the ability to go in and see how many of these might be latent or have zero landings. We've got an area that has a significant amount of fishing pressure, and, again, this is just a picture of the percent of total annual harvest of Monroe County versus the east coast of Florida. This is FWC data. Again, this gives a pessimistic view of Monroe County in that it includes some of the Gulf landings, which tend to have more gag in them, but you can see that compared to just the east coast of Florida, not even the whole South Atlantic, gag is virtually not really a species of any interest to the Florida Keys.

Okay, this was with FWC landings and not with logbooks, so I asked the National Marine Fisheries Service to give me logbook data to see if what I was looking at was really biased by Gulf landings, and it turns out the logbooks show the same picture. We could see here that for the entire South Atlantic Region, according to logbooks, the Keys comprise – well, this is the Keys and Miami-Dade, 26 degrees latitude – comprise only 1 percent of the gag.

You see the reds went down from 34 percent to 14 percent, and I think that's a function of getting rid of the Gulf landings in Monroe County, and the blacks went up a percentage. What we have here with black and gag, it appears that blacks replaced gag in South Florida. It's even such that the Keys fishermen, when they go to the Gulf side of the Keys, figure on catching more gag than blacks, but on the Atlantic side of the Keys more black than gag.

This next table is simply the same thing except that 25 degrees latitude – that's the only way the logbook can try to separate regions is by latitude – this shows less than 1 percent is gag. Now,

25 degrees latitude is about the middle of Key Largo. It seems to me – my whole point is that Amendment 16 just doesn't have the specificity to really evaluate social and economic impacts for the management measures that are being implemented.

I think if anything could be done to make it more detailed, to make it more specific, I think South Florida should definitely be looked as a unique region from the rest of the South Atlantic, not just in Amendment 16 but in the future; and I would say at some point southeast Florida, the Miami and Fort Lauderdale area should be looked at with detail.

My anecdotal information seems to be that is a black hole. Once you get up there, fish just kind of disappear. Most of the harvest is really coming out of the Florida Keys even when you combine it with Miami-Dade. That's my point, to try to get people thinking about the need for regional management. It didn't strike me until I started looking at what percent of gag is caught in the Florida Keys and for the fishermen that asked me to do this. If you look at that and you look at the magnitude of permits in the Florida Keys, the Florida Keys need to be looked at with more scrutiny in all these actions. That's all I have. Any questions?

Ms. Belcher: Thanks, Doug. Any questions for Doug? Alex.

Mr. Chester: Doug, from your experience – I know historically there have been a lot of identification problems between black and gag in the entire southeast, but it has almost become or had almost become traditional that if you were fishing in Florida you called it black and if you were fishing off North Carolina you called it gag and you missed the overlap. I am just wondering how much of the extreme nature the statistics you show might be identification issues.

Mr. Gregory: I tried to look into that by talking to charterboat fishermen and commercial fishermen, and that's really prevalent in the Gulf. All through the discussions of the Gulf IFQ they kept referred to gag as black and that sort of thing. I think that's a marketing benefit. The reason I was talking to the fishermen is part of what do as a Sea Grant agent in the Keys is take proposed regulations like we have in Amendment 16, take it to the public, and if they scream and yell, okay, challenge them, well, what can be done differently that will accomplish the goal of protecting this resource but minimize or reduce the negative impacts on yourselves?

The thing that came out of that discussion was, well, why don't we just close gag in the Keys for six months, eight months or longer, longer than four months to offset any bycatch release mortality that might occur, but not close the entire fishery? When that came up, I said, "Okay, now, fishermen, we know about this identification problem. Would you be shooting yourself in the foot by doing this? Are you landing gag and calling them black?"

They assured that this was not a problem. I know that happens and not all fishermen can tell the difference and it happens on the commercial side, but nobody, none of the industry people, charterboat, recreational, commercial, were worried about losing their harvest of gag because they couldn't market them as black anymore. That kind of reinforced the statistics that gag really are an inconsequential part of the fishery in the Florida Keys on the Atlantic side.

Ms. Belcher: Other comments or questions for Doug?

Mr. Carmichael: SEDAR 10, is that what it was, that addressed gag, they discussed the gag versus black grouper misidentification and decided that in the commercial fishery the majority of the black grouper were actually gag. They discussed it in the recreational fishery and say that in MRFSS, prior to 1990, there was a lot of overlap and then they updated interviewers and training and changed the contractors and such, and I believe that since 1990 that the recreational component at least is fairly accurate.

It also acknowledged that Monroe County is sort of the one place where you tend to see more of the black grouper than the gag grouper; whereas, in other counties the change suddenly showed that a lot of what had previously called black indeed was gag. Monroe County sticks out with regard to that black versus gag thing even after the correction in MRFSS or the update and revision.

Ms. Belcher: Further comment and discussion? Eric.

Dr. Williams: Back to the circle hook proposed alternative, there are some issues with the document that concern me. As far as the impacts the regulation would have, I don't they're justified very well; it's not laid out very well. There are a few citations – well, let me read you one thing. This is rather a bad statement on Page 4-156, “Incidentally caught species in the directed gag and vermilion snapper fishery include red grouper, scamp, red snapper, gray triggerfish and greater amberjack. These species have similar mouth morphology”.

I don't think a triggerfish has a similar mouth morphology as a greater amberjack or a red snapper. I'm concerned that the impact of this has not been fully vetted in this document. In fact, I would suspect that a circle hook regulation would pretty much wipe out triggerfish from the recreational catch. I can't imagine a triggerfish getting hooked on a circle hook, but I could be wrong.

I guess my concern here is for that particular part, the circle hook thing, I think there needs to be a better documentation of the effects. I think somebody mentioned we'd like to know what is the exact percent reduction in mortality that might occur due to the implementation of the venting tools and the circle hooks, and I'd like to see that as well in this document. It just seems like as an analogy it's almost like it's a little rider that was tacked on to this amendment and there is not much analysis to back it up, and I don't like the way it's put in. It just sort of slipped into this amendment.

Ms. Belcher: Further commentary to that? Doug.

Mr. Gregory: I just have something on black grouper that is preliminary, but I have assumed for a long time black grouper were pretty much overfished because they mature at 32 inches and we're catching them at 24 and smaller. Then I saw a publication by a marine fish conservation

network and Pew or Oceana that used black grouper as one of the species that's been decimated, and they used landings data.

Well, what is the impact of regulations on this? So I tried to look at this, and I think again using – this is the NMFS Query System. Now, the NMFS Query System doesn't have gag in it, so maybe we should go to FWC data to try to piece this out. But, this time between '86 and '90, I don't know how much of this is gag or black and how much of this decline is really a decline in black, but these red lines and blue lines and vertical lines are amendments.

The first red line is when the minimum size of 20 inches was implemented and fish traps were banned. The second line, which is blue, is when the Oculina Bank was closed. The second red line is when limited entry was implemented. Then the last one is when the size limit was increased to 24 inches and longlines were prohibited. I think this decline, contrary to what that publication said, may not be an indication of a declining stock.

I'll be glad when we finally get a stock assessment for black grouper, Luiz, NMFS, wherever you are because these declining catches may be the result of management, and it may mean that the stock is growing or rebuilding more than it would have otherwise. As a biologist, I'd still be concerned that we're harvest juveniles.

So this is just an aside that I want to look at. I think until we can piece out gag landings, and I think the next stock assessment could do this, we might have something instructive here. I don't think we can assume black are overfished or overfishing until we have a stock assessment. I think that's the point of this. We certainly can't go by landings as an indication of whether it's overfished or not.

Mr. Waugh: Well, black have been classified as overfishing based on an SPR value that we've gotten so the only way that can change is to have a stock assessment regardless of what we do. The determination has been made. The only way that designation will change is to have a stock assessment.

Ms. Belcher: Any other comments or discussion to this?

Mr. Carmichael: Well, according to the SEDAR report, 99 percent of the reported gag and black grouper landings were considered gag, as much as 99 percent well into the nineties over most of the physical area. There were only a few areas where it wasn't a very large proportion, so it may very well be that largely shows gag. I think you're right, you have to really get into it and do something for black to figure out what is going on. Using the NMFS online data base, I think you probably are really subject to having that overlap of gag and black together.

Mr. Gregory: Yes, this makes me a little more optimistic about the status of black than I have been before looking at this.

Ms. Belcher: Okay, anymore specific points to Amendment 16? Now comes the hard part, then. Given the discussion, how do we want to move forward with this document as far as endorsing this document? Doug.

Mr. Gregory: I was trying to look back at the document that we saw in December. I haven't had a chance to do, but I don't – in my mind, I don't see how we can endorse this at the best available science or analysis of management alternatives.

Ms. Belcher: Other opinions? Andy.

Dr. Cooper: Well, I am curious about your lack of alternatives. I mean, this went out for scoping and was completed in September 2007. Were more alternatives presented in scoping; were any of these comments brought up in scoping? I mean, I just don't know if what we're seeing here in this document is actually everything that was considered or are just the final ones after a bunch of other vetting has gone on that I know my brain doesn't keep track of.

Mr. Waugh: Appendix A includes the alternatives that the council considered but eliminated from detailed analysis, so there are some additional alternatives that were looked at. Appendix C presents a summary of the scoping comments. Again, as a part of this, remember that the council was under a one-year deadline to end overfishing; so, when you trade off time, you have to lose some alternatives, but the council did consider this to be a reasonable range of alternatives. The DEIS comment closes, I think, at 5:00 p.m. today, so we'll have the remainder of the comments.

Dr. Williams: My biggest concern with this amendment is reducing the bycatch of snapper grouper species. I mean, for instance, just the title of that is completely inappropriate when the only alternative is – well, one is no action. The other is to require venting tools and the circle hooks. Well, that doesn't necessarily reduce bycatch. It may reduce discard mortality.

There is a lack of any documents to support it, to show the impacts, to show the savings that we're going to get from this. As I pointed out, it suggests that triggerfish have a similar mouth morphology to other species. I mean, it's not support at all, and I'd want to see some numbers to justify this and it's just not there.

Mr. Waugh: Certainly, if the SSC has problems with certain measures that are in here – obviously, the council is under the gun to end overfishing for gag and vermilion, so those are the things. If you have concerns about other measures, then I would urge you to make sure you clarify your recommendations specific to that measure, but give us some guidance on the remainder of the document.

Mr. Gregory: I have a question, Gregg. What is appropriate for us to say like I'd be interested in seeing the impact of different months of closure regionally, but that's asking for information or data, but the council is going to make a decision this week apparently. Can we make a motion – is it appropriate for us to make a motion, assuming it passes, that the council actually do that analysis, that alternative closed seasons and the interaction of closed seasons and quotas be

looked at on a regional basis and maybe even more regional than the two that are identified in the document?

The question is if you've got a quota, why also have a closed season and let the quota dictate the closed season. I wonder if it's because of the differential landings by month, and we don't have that data by region. We have it for the whole fishery combined in this document. What would be the way to go to try to get the council to consider an alternative to look at different closed seasons by region?

Mr. Waugh: Maybe John will want to comment on this, too, and it's something for you all to determine, because in my mind you're getting – you're on a bit of a slippery slope because what you're saying is you disagree with the alternatives that the council has picked and you would like to see some other alternatives analyzed.

I think the charge to the SSC is to review what is being proposed by the council; are the biological, social and economic analyses sufficient to justify those measures, and have the measures that are proposed; will they in fact end overfishing; do they have a reasonable confidence that we will end overfishing? I think that in my mind is clearly the function of the SSC. If you then get into where you would like to see some other alternatives, that's getting a little slippery.

Mr. Carmichael: Yes, I'd have to agree with that. I think as far as how you go about proceeding from here, I think the more you do by motions the better. If you there are parts like Erik suggested that the analysis is inadequate, make a motion to that effect and some suggestions as to what should be done and then things can come back to you perhaps, but, you know, be reminded of the deadline, which is a court-specified deadline on this, with the council having to approve, is that correct, has to be in place by –

Mr. Waugh: Not court; it's a legal mandate that we have to complete a document within one year.

Mr. Carmichael: Okay, so we have to have a document completed by –

Mr. Waugh: This June to be within that one-year time period. Now, as I said, the comment period on the DEIS closes at 5:00 today. The council will look at all of those comments. If they receive comments, including yours, that they feel are sufficient to justify further analyses, they can do that and just recognize that they won't meet the one-year deadline and finalize it in September. I don't think that would be catastrophic.

Mr. Carmichael: So I think that's pretty clear, then, what the deadline is. Now I think in terms of dealing with the regional aspects, a general motion about regional impacts is something that you may be not so far down the slippery slope to do as opposed to getting too deep into options the council should consider.

If you simply acknowledge that you feel the document fails to truly capture the impacts that may vary by geographical regions that are related to fishery distribution, then that's kind of the scientific aspect of it without telling the council how you think they necessarily need to fix that. Then you may not be so far down the slope.

Dr. Barbieri: Doug, would this last comment address your concern about the inequality from a regional perspective?

Mr. Gregory: No, I don't think so. Well, one, it seemed like too few alternatives were considered for the action, but I think I heard that's not our call to say anything about that; that we are to analyze what is presented to us and vote it up or down as best available analysis, best available science.

Dr. Cooper: I guess a question I have, to put the economists and sociologists and all the other human-intervention folks on the spot, do you think the points raised by Doug regarding the economic analysis would actually change the ordering of preferred alternatives relative to the economic impact or will it will just scale things such that in the end one option will rank the same? I know I personally couldn't quite follow all the numbers flying by. I don't want to put you guys on the spot too much, but that's really the point to consider is has Doug brought up something that invalidates the socio-economic analysis or is it just not enough detailed?

Dr. Crosson: I think there is sufficient detail in there for a lot of the different options including some of the regional allocations. There is just a lot of time pressure apparently that the council is under. I think the decisions about whether to use a season or a regional closure or whatever, I think those are decisions that are left up to the council and not to us.

I mean, I think the data is in there. I'm certainly not going to state which I would prefer, but I think the information is in there for the council, and I think it's up for them to decide. I understand some of Doug's concerns, but I think most of the information is in there for these different alternatives, even including the ones that are not listed as preferred.

Ms. Belcher: Additional commentary? Luiz.

Dr. Barbieri: I would just ask since Erik brought up the issue about the bycatch reduction and the mortality reduction; I mean, how do you think – I'm just trying to gauge, Erik, how this could really be improved to give us more objective information here. I mean, the way that is presented, my understanding is that having a recognition that venting tools, dehooking devices and circle hooks decrease bycatch mortality by some extent, and it varies with species, it varies with the areas fished and all, but this is basically, if I understand it correctly, a step in the right direction into reducing the bycatch mortality, but with no intent at this point to reduce it by any specific amount. I mean, this is basically sort of an add-on to the analysis that had already been done for a percent reduction that is being targeted.

Dr. Williams: Yes, my concern is that this – I mean, if you were to take this component out and it was its own stand-alone amendment, it wouldn't hold water, in my mind. It has been tacked

on to this, which has got all these gag and vermilion reductions, but if it were pulled out as its own entity, which it really is because it's dealing with the snapper grouper fishery as a whole, and it stood as its own amendment, it wouldn't pass muster, I don't think.

Dr. Crosson: I'm sorry, are you speaking about the hook requirements? Yes, certainly, especially this question about triggerfish and affecting the triggerfish fishery, that's really very open; and if that's included in the document, I completely missed it. Obviously, if that's new, there is no information about what would be the economic impact on that fishery, which is substantial.

Mr. Waugh: Well, this is a measure that did surface very late in the development of the amendment, and I think the characterization that it's tacked on with not a whole lot of analysis is accurate. In terms of the comments we received at public hearings, it would have huge impacts on the yellowtail fishery, the mangrove fishery, the gray triggerfish fishery. A lot of fishermen have told us that this sort of slipped through in the Gulf without them knowing anything about it, which is why the objections were not raised in the Gulf when this went forward.

I think the state of Florida is running into a lot of issues as they have developed the regulations to track what was done in the Gulf. We have got the issues that Doug did a good job of raising over the specificity of the regulations leading you down to one manufactured product. So there are a lot of issues that the committee and council will need to discuss about this.

This is one of the items in Amendment 16 that we have characterized to the public as the council does have flexibility with this. They don't have to include this; whereas, the measures to actually implement the TAC for gag, they have to implement that. There is no flexibility there, if that helps your deliberations some.

Ms. Belcher: So, again, back to the group, what is our pleasure relative to Amendment 16? Do we want to put a motion forward as far – Doug.

Mr. Gregory: Not a motion yet, but would it be inappropriate or problematic to have this requirement be specific to groupers only, the circle hook, dehooking and venting tool requirement? Any thoughts on that?

Dr. Williams: I think enforcement would be a nightmare then. It would pretty much be unenforceable.

Mr. Carmichael: How do you define the grouper fishery in that case?

Mr. Gregory: Well, the same way that the snapper grouper is defined. If you're catching grouper, you have to have a circle hook, dehooking tool and venting. Everybody that catches grouper, everybody will have the tools on their boat, anyway, but the circle hook, I think, is the major factor in release mortality reduction.

The species we're concerned about, gag in particular – of course, the red snapper is a different issue, we could apply it to that. But it's the same problem with snapper grouper, if I'm fishing for some other species and I catch a grouper or a snapper on a J-hook, I have to release it technically, according to the law. So it is unenforceable but even the current regulation is somewhat unenforceable, but it's an education, it's a compliance, it's a step in the right direction, and eventually more and more people will be adopting these more beneficial techniques.

Dr. Williams: I mean, my concern is that I don't think everybody looks to venting and circle hooks as a savings, but there are other methods. One, we have to step back and think, well, why are these fish being discarded? Are they being discarded because they're undersize or are they being discarded because of bag limits being reached? That has implications as to whether circle hooks are going to be effective or some other methods might be effective.

If they're undersized fish, there are plenty of other methods that might work such as hook size itself, actually, could prevent the hooking of smaller fish. That's my concern is there's just not – where is the analysis to support these particular measures are the best way to get savings; you know, what about time-area closures or even limited entry in the recreational fishery?

There are tons of management options here, and these were picked out because there is some sense that they'll reduce discard mortality, but there are no numbers to support how much it's going to reduce. That's where, from a science standpoint, there is nothing backing it up, really, in my mind.

Dr. Cooper: Okay, my suggestion is – and I'll put it in a motion, but I'll lay out the theory first. I'll suggest a motion that we say that the reduction of bycatch mortality section of Amendment 16 is not the best available science due to a lack of thorough analysis on the effectiveness of the measures; and then put up another motion that says the remainder of the document either is or isn't, and then we can debate those separately. That way we can move things forward.

I have a motion, then, which I'm going to do off the top of my head, and that's while we appreciate the efforts at reducing bycatch mortality – it was just going to be to say we appreciate the efforts and stuff like that, which we can either do or do not. We don't have to do that; we can be blunt.

Okay, we move that despite appreciation of the effort extended to address bycatch reduction in Amendment 16, the committee determines that the measures intended to reduce bycatch mortality are not best available science due to a lack of analysis on the effectiveness of the proposed measures.

Dr. Williams: Second.

Mr. Gregory: While that may be technically true, I'm afraid we're throwing the proverbial baby out with the bathwater. I mean, circle hooks have a record and venting tools have a record of increasing release survival. The literature is there; it's clear on that. What we don't have is any

sort of estimates of how much these measures will reduce or increase release survival once they're implemented.

I think some of that data does exist; so if they can get that data in the document before it's submitted, I would be somewhat happy. The other thing that Erik raised was the applicability of this to triggerfish. Clearly, it's not applicable. The issue raised by the fishermen in the Keys that fish yellowtail and gray snapper, they're fearful that this is not applicable. They're fearful because they've never used circle hooks, so they don't know.

There has been one small demonstration, but they're fearful that it's going to be very disruptive to their fishery and could actually increase release mortality because of the difficulty of getting a circle hook out of an undersized fish as opposed to a J-hook. That's why I kind of thought about let's just apply this grouper. I wouldn't want to lose the potential regulation completely, but this is an amendment on grouper.

Let's apply it to grouper and maybe eventually we apply it to all species as we take them up under different amendments. It is an enforceability problem, but that's the way it is. This is not a regulation in that sense. This is a regulation that says this is the direction we want to go, and I think it will be effective even if we limit it to just grouper species. At least it will make more common sense to the fishing public in respect to other species. Clearly, it's not appropriate for triggerfish. I don't know about yellowtail or gray snapper, but I'd hate to lose this completely for grouper. I think grouper need to have measures like this to increase its survival mortality.

Mr. Chester: I tend to agree with the first part of what Doug said with respect to what is known about circle hooks, and I'm afraid that there is a rather large body of information about the bycatch benefits or mortality mitigation effects of circle hooks in many fisheries, probably not quite as much information for snappers and groupers, but I believe there is some small amount of evidence for that.

I'm not comfortable with a statement as strong as this thing is not based on the best available science. I'd be much more comfortable, if it's possible, to point out the deficiencies in the write-up of the amendment and strongly recommend to council that much more documentation be provided in the write-up.

Dr. Williams: I concur that circle hooks definitely are a benefit. My opposition to this is the way it was presented. It's not presented with any science behind it other than a couple of citations, which Alex just mentioned there is a plethora of information out there and it clearly wasn't researched out thoroughly, and I would want to see all the impacts of this. This actually has a lot of far-reaching effects on all the snapper groupers and really should stand as its own amendment essentially because it's a pretty big action, in my mind, and to have it just slipped into Amendment 16 with very little supporting documentation just doesn't sit well.

Dr. Cooper: I would gladly accept a friendly amendment if you wanted to say something like, after the last sentence, "increased documentation may rectify this issue"; put it out there so that we're not throwing out the whole thing. I was just trying to address Erik's concern and what

other people seemed to be nodding their head about. If there is a way to save portions of it or to give suggestions to council so that we're not invalidating it, please feel free to make an amendment. I wholly support that.

Mr. Carmichael: Perhaps you can solve some of this by simply doing that and also saying "encourage the use of circle hooks and dehooking" without necessarily making them a requirement. That seems to be the core problem is the requirement of circle hooks versus encouraging the use of circle hooks.

If you encourage the use of circle hooks when people deem it appropriate, you increase the familiarity of the fishing public in general with circle hooks; you're getting more information and more studies on circle hooks; you get an idea of which fisheries they really seem to work and really reduce mortality and build up some experience so that you can get an idea of actually quantifying their impacts, then you might be able to solve some of these problems down the road. Maybe the SSC recommends not as a requirement but that the council continue to encourage the use of circle hooks for all the reasons that you've talked about.

Dr. Williams: I'll just add – I mean, I don't think the statement throws out the concept of circle hooks. It just throws out this particular measure in this particular amendment, and I don't think it goes any further than that. I think people might be reading more into it. I mean, we can make another motion after this saying we support the use of circle hooks, but yet I just don't think that this is saying, no, don't ever put in a circle hook requirement. We're not saying that. We're saying that this particular measure in this particular amendment is not based on best available science.

Mr. Gregory: Well, in one sense what John says makes sense because I don't think we really know what a circle hook is anymore. The circle hooks coming on the market now are not what they used to be. They're not as circled. The old ones were difficult to bait; the new ones aren't. There is no standardization among circle hooks.

I know from personal experience, just from Saturday, half of the fish I caught, gray snapper with circle hooks, weren't caught in the lip, they were caught more down in the gullet, but I think I had an easier time removing the hooks. They can swallow circle hooks. I've got a picture that I shot last month that had a jig and circle hook in its gut, and the circle hook had obviously been in the gut a long time because it had growth around the shank.

So circle hooks are not perfect, but I think it is an improvement over a J-hook. It's a more complex issue than just "J" versus circle. But, still, I understand the triggerfish, if there are species within the snapper – maybe it's just wrong to apply this to the snapper grouper complex in total, but I would not vote for this amendment as it stands because I'm afraid that would result in the whole measure being dropped.

Ms. Belcher: So what do we want to do with motion? Jeff, do you have something to the point?

Dr. Buckel: I agree with everything that's being discussed, and I think what we're saying it's not based on best available science, and it could just be simplified. I think Erik said this already, so "are not based on best available science", period, and not get into due to lack of analysis. It's just that there is a lot of documentation, a lot of literature that is not included here in Amendment 16 on this issue, and a lot of it is recent, within the last year, on these different circle hook types that are there, and the circle hooks with the larger gaps are leading to just as high of injury rates as J-hooks. We need to basically get all our ducks in a row before we recommend a regulation change, in my mind. I think that's what folks have been discussing here.

Dr. Cooper: I kind of liked it in there that it's basically due to the lack of documentation and not due to a lack of demonstrative effective – you know, there is a lot out there that isn't talked about; and it's because – at least from what I'm understanding with Erik, it's not because it's not effective.

It's not that we're invalidating that; it's that the write-up isn't good enough, and basically I don't know what it would take to make it good enough, but that we don't want to throw out that provision. We don't want to say that circle hooks are bad, but what we want to say is that this document doesn't give us what we need to adequately vet the effectiveness of the alternatives.

Mr. Chester: Taking my cue from Andy on that and scribbling some things based on his invitation for a friendly amendment, if I can read my writing, starting with "the committee determines that the justification for measures intended to reduce bycatch is deficient and strongly urges that language be included that clearly documents the effects of such measures".

Mr. Carmichael: What was after "address"?

Mr. Chester: Okay, "committee determines that the justification for measures intended to reduce bycatch is deficient and strongly urges that language in included that clearly documents the effects of such measures".

Dr. Cooper: Yes, I accept that as a friendly amendment.

Dr. Williams: I concur.

Dr. Larkin: I think that's getting closer, but I still think some of the language focuses on the measures instead of going back to technically we know they work. It's the application to these fisheries is the problem that's not – and I don't know if it's making it longer – "documents the effects of such measures for the species that are included in this amendment" or something like that, because there is this whole body of literature that does show technical effectiveness. It's the application to this particular amendment species that are covered that's the problem.

Ms. Belcher: So how do we incorporate it?

Dr. Reichert: Did we vote on that first motion?

Mr. Carmichael: No.

Mr. Chester: I move that we consider a substitute motion. I move a substitute motion that we move despite appreciate of the effort extended to address bycatch reduction in Amendment 16, the committee determines that the justification for measures as applied to the species addressed in Amendment 16 intended to reduce bycatch are deficient and strongly urges that language be included to clearly document the effects of such measures.

Ms. Belcher: Do we have a second?

Dr. Reichert: I second.

Ms. Belcher: With that, any further comments or discussion on this item? Seeing none, we'll go ahead and put it to the vote. We're voting on the substitute motion. All those in favor, raise your hand; anyone opposed, raise your hand. The substitute motion passes. We're now making on this as the main motion. All those in favor, raise your hand; anyone opposed. The motion passes as the main motion.

Okay, so this takes care of that portion of the hooking thing. The dehooking and venting issue – Doug.

Mr. Gregory: A question as to what that means; does that address the species concern that I and Erik brought up; it may not be applicable for all the species?

Ms. Belcher: Yes, because it says “as applied to the species addressed”, so it may work for some of those that are that, but then, as you're saying, there are other ones that it doesn't and that's why we're putting that forward.

Mr. Gregory: Just quickly, I found something that Moat did. They did studies on this, but that program has been closed down, so it's not easy to find it on their website. We may have to do some digging, but just one study they did where they kept live red grouper, gag and red snapper in thousand-gallon tanks and observed their feeding behavior, and they observed that grouper tend to mouth the bait and hook before they take it and snapper immediately hit it and go with it, so snapper tend to immediately swallow their food. So, clearly, different species are going to react – or the catchability of different species is going to differ.

Ms. Belcher: And I think that's where by breaking it out to say it applied to those species addressed; that's where, obviously, the bulk of the discussion has been is because not every specie has that same impact.

Mr. Carmichael: You still have the rest of Amendment 16 to deal with and then perhaps, given what you've said in the other discussions – and Erik's comment could be seized upon – that you ask that the council address a comprehensive bycatch reduction amendment that deals with not just these couple of things but measures across the board that deal with what is apparent to everyone is a growing problem of bycatch reduction and that you deal with that in the regular

amendment process as an objective of reducing bycatch that is done with appropriate time and evaluations and everything that deals with many, many species because you can't necessarily describe an individual fishery.

Mr. Waugh: Rather than getting into a discussion of this as a separate amendment, this will come up in your discussions of 17 and 18, and 18 being red snapper. Assuming you would sign off on that stock assessment, we will be looking at time area closures. I would encourage let's not spend anymore time on this now. Let's revisit it after we deal with 17 and 18.

Dr. Cooper: Okay, taking those leads, I have a motion to propose that we can debate. With the exception of those points noted in the previous motion regarding the bycatch reduction section, we determine Amendment 16 is based on the best available science. I'm throwing it out there; strawman; focus discussion.

Ms. Belcher: Do we have second?

Dr. Barbieri: I'll second.

Ms. Belcher: Okay, open for discussion or comments. Doug.

Mr. Gregory: The economic analysis of the seasonal closure in the Keys with 38 percent impact – and that 38 percent was all the measures taken together, the seasonal closure and the quota, but yet those measures taken together were designed to reduce fishing mortality by 37 percent on gag, so I don't see how that can be realistic given the disproportionate abundance of blacks and reds in the Keys; that the impact of this measure, particularly during the winter tourist season, has got to be more significant than a straight one-to-one relationship between the reduction in mortality and the reduction in the economic impact.

The economic impact would tend to me to be much greater than 38 percent. I don't this amendment is based on the best available science given the lack of analysis of the options it has got and the options that it doesn't have in the document.

Mr. Waugh: Gregg, I think that 38; that's saying of the impacts from the spawning season and quota, 38 percent of the impacts are in the Keys.

Mr. Gregory: Well, then, that concerns me even more because, clearly, what that is doing is closing the entire Keys fishery with no benefit to gag whatsoever. I think if the council had the distribution, if I'm using the right word, economic distributional impacts of these measures relative to the benefits, there would be other options, there would be other things done in this amendment.

I want to follow this up. However, this goes with a motion that's in the council's and in the stock assessment's look at the data we have for these species on a more regional basis than we are. I think the South Atlantic Region is way too diverse to just say we'll look at it as one whole region, as one whole stock, one whole population.

Ms. Belcher: I think the problem, though, that we're running into is the fact that, again, it's the tightness of the time in which this can be done and the fact that there are only so many alternatives that they can look at. I don't disagree with you as far as the fact that there is definitely or probably an – you know, the allocation of how that is going to impact is obviously not there, but I think maybe the best thing we do is – again, because there has been consideration of regional, it really needs to be pushed hard to home that may be even on a smaller basis than what it is. I just don't know that there is anything that Gregg and them are going to be able to do to account for that at this point.

Mr. Waugh: Well, right now the council does have an alternative in there that would split that gag quota into two regions, North Carolina/South Carolina and Georgia/Florida. That's in there; that's an alternative that's been analyzed. They could do that and still meet this one-year deadline. They could also conclude that based on the public comments that they need to look at this more finely and direct that some additional analyses done and additional public comment between now and September, recognizing that then they'll be one council meeting behind in the deadline. Those are all determinations that they will be making, but there is an alternative in there that splits it into two.

Ms. Belcher: But, Doug, what you're saying is that's even a fine enough resolution at that point; correct?

Mr. Gregory: Correct.

Dr. Cooper: My concern is, though, with this slippery slope, it's not our job to determine whether or not they chose the best alternative. Our job is does the alternative chosen achieve the biological goals that it says it does, which it sounds like Doug isn't arguing with, and then also the economic analysis behind that; is that accurate. So, in other words, was the decision made based on the best available science and not did they make the right decision.

Now it sounds like Doug is saying, no, the socio-economic analysis is flawed. I heard from Scott that, no, it was pretty thorough and works pretty well. I haven't heard the other socio-economic folks comment on whether or not the analysis upon which they have chosen their alternatives is or is not flawed. I think, for me, that's what I usually try and vote on is was the information that they based it on the best available information or was there a flaw in the analysis and not did they choose properly.

Mr. Gregory: If I may address that, the slippery slope I'm on is not the one he mentioned. It's not that I think they made the wrong decision. The slippery ramp that I'm on is whether they analyzed or looked at enough options as well as I don't think the socio-economic analysis is complete or appropriate. It seems to me they should have looked at more alternatives to address this concern. Now, I understand from what John said earlier, that's a slippery slope, too. I'm not saying they chose the wrong alternative.

Dr. Williams: Doug, I'm not clear on what your – the economic analysis to me, looking at what Gregg presented, shows a clear disproportionate effect on Florida. I mean, the gag recreational impact by area shows that Florida is losing a million bucks and the rest are only losing in the tens of thousands. I mean, that's a huge disproportionate effect. It seems like that is pretty accurate from what you described as the fact that it's going to impact these other fisheries.

It seems to be reflected in what Gregg presented. I think you were focusing on this percent reduction, and I think Gregg tried to explain that percent reduction was focused on gag, but then the actual economic impact money-wise does show a clear disproportionate effect for Florida. This is in Gregg's presentation, Slide 17 of his presentation.

Ms. Belcher: More discussion and comments on this? Sherry.

Dr. Larkin: I'll just make a brief one, and I guess it's to go back to when Stephen said that there was some clarification coming with respect some of the economic numbers that were in there. I think one comment was of the numbers – the absolute value might not be right because of the way the discounting was done, and I guess it would only affect the relative ordering if those different columns had cost and benefits occurred in different periods of time, then changing the discount might affect those orderings, but I don't – I think that's coming and I don't know when we might get a chance to see or if we're going to or if we need to see the revised version, but perhaps some of those will be flushed out when the editorial changes are made.

Dr. Holiman: Yes, those will be flushed out when the editorial changes are made, and my expectation is, again, all that will change is the magnitude and not the rankings; that the analysis will be evaluated on a single-year basis, sort of like an average annual, so there will not be a multiyear period that is discounted back to a net present value, so the interest rates will not affect the analysis at all or the rankings and stuff.

I just wanted to make an additional comment. I heard the 38 percent figure raised with regards to the Florida Keys, and I'm looking at Table 4-29. I believe Gregg made the comment that he thought the 38 percent referred to the Florida Keys share of the total effect, and I believe that's incorrect. I think the analysis is basically saying – to those of you who can look at 4-29 right now, you've got the baseline conditions at the top of the table.

For the Florida Keys – and this is all the commercial sector – it's basically seventeen to eighteen thousand dollars, depending upon the discount rate you use. My interpretation of this table is the Florida Keys commercial fishery is expected to receive a 38 percent reduction in that baseline as a result of this action because you've got totals across the board for all states and all regions. Florida, as a whole, is taking the brunt of the effect, but the Florida Keys is 38 percent, but it's a relatively small fishery compared to the gag fishery in the other regions.

Ms. Belcher: Doug, does that help or kind of address some of your concerns?

Mr. Gregory: No.

Ms. Belcher: I was hopeful. Sherry.

Dr. Larkin: Is it possible that some of the additional numbers Doug presented could be included in this document to address some of those regional impacts as soon as you've validated that everybody should have. Maybe that would be one step closer to showing the council what a more accurate depiction of those impacts might be.

Mr. Waugh: Yes, if he provides that to us, we'd be glad to fold that into the document, definitely.

Ms. Belcher: So back to the original motion, comments or questions? Okay, we'll go ahead and call for the vote, then. All those in favor of the motion, raise your hand; all those opposed. Okay, the motion passes. All right, that much gets at 16. Anybody have any further comments of discussion they put to this, or do we feel we've pretty much put this one to bed.

Okay, with that, it's 12:42, so we can go to lunch. I'm going to go ahead and stick to the original timeline, which was an hour and a half. Then when we come, we'll get in Snapper Grouper 17. The work session we'll kind of discuss when we get to that point. Some of the things that we've had obviously so far – and the bulk of them have been more informational – what we might defer to do is the heavy items we'll work on in the work session, which is, obviously, going to be shortened in duration, and then homework would be writing up those little short informational things, if that's amenable to everybody.

Mr. Waugh: Carolyn, what time are coming back, and we'll start on 17, right, when we come back?

Ms. Belcher: 2:15; Amendment 17.

The Scientific and Statistical Committee of the South Atlantic Fishery Management Council reconvened in the Normandy Room of the Renaissance Orlando Hotel Airport, Orlando, Florida, Monday afternoon, June 9, 2008, and was called to order at 2:05 o'clock p.m. by Chairman Carolyn Belcher.

Ms. Belcher: We are going to discuss Snapper Grouper Amendment 17. I know you all have been just dying to get into this since we get to produce some numbers that we've really not been too happy with producing. Andi had passed around hard copies of the roadmap in case anybody was missing them because there is a sheet in there that – it's on Page 16 – that has the recommendations for those species that we have to provide them for.

Basically, they have pulled out of those assessed species all of the benchmark and threshold values that have been produced. We have estimates of MFMT for some of these species, OY, yield at FOY. Okay, our actions under this are – and we're going to have a status update from Rick DeVictor and Jack McGovern is going to discuss an overview of the species.

We have to provide overfishing limits and define acceptable biological catch for twelve species – I thought it was ten; it went to twelve? Oh, that's right – and review alternatives for accountability measures, shallow water and deep water species; and actions to limit catches below ACLs and to extend snapper grouper regulations into the Mid-Atlantic. We'll start out with Rick doing the Amendment 17 status update, and we'll carry forward from there.

Mr. DeVictor: Thank you, Madam Chair. This presentation is not in your briefing materials, but I'll go through it pretty quickly. I know we have a lot of work to do, especially with setting OFLs and ABCs, but just a little background on what is in Amendment 17. At the current moment it's setting ACLs for those twelve species that are in your roadmap on Page 13; setting ACTs; setting accountability measures.

Then the council must set actions to limit the catches to the ACT, so they have to achieve the ACT. Then as you outlined, there are three additional actions. One is to extend the management unit northward into the Mid-Atlantic Council's jurisdiction. Another one is to set reasonable quotas for snowy grouper; and, finally, the final action is to set MSY and OY for greater amberjack and mutton snapper, two species that have recently gone through the SEDAR process.

What I'll be touching on mainly here are those first four bullets; the ACLs, the ACTs and the AMs. The new and improved Magnuson Act in 2007 said any FMP prepared by any council shall establish a mechanism for specifying the annual catch limits, or the ACLs, in the plan, such that overfishing does not occur in the fishery, including measures to ensure accountability. It's laid out pretty straightforward right there.

You notice that the ACTs are not specified there and the ABCs aren't, but there has been a proposed rule that recently has hit the streets, which I'm sure most of you know about, and it talks about the ACTs there. So what are ACLs? Well, a limit in pounds or numbers of fish that triggers the accountability measures to ensure that overfishing is not occurring. As I just mentioned, this was required in the MSRA that was put out January 1st or signed on January 12th, 2007.

The kicker here is it may not exceed the ABC or the OFL, and I'll talk about those in a second. And for those species undergoing overfishing, they have to be in place by 2010 and the rest of the species by 2011, so that's why this amendment will deal with ACLs for those twelve species that are undergoing overfishing. The rest of the species will be handled in the ACL Comprehensive Amendment.

The catch target; again, the catch target was not mentioned in the MSRA, but has since been mentioned in the proposed rule to the National Standard 1 Guidelines, so it's a target catch expressed in pounds or numbers, so this has to be set below the catch limit or at the same stance. It could be set to OY, the catch target – again, the council has to achieve the ACT – and it could differ by sector, so you could have a separate ACT by the commercial sector and one by the recreational sector, which I'll show you in a second here, and you could further separate the recreational sector into for-hire or private recreational.

That's up to the council on how they want to split up the ACT. Here is a graphic that sort of outlines this where the OFL and the ABC are set by this group right here, and that's what we are looking for to get for those twelve species. Then based upon that the council will set the ACL, and we have alternatives currently in the options paper where the council looks at various ACL actions that go below the ABC.

Then you could split that into two separate sectors, like I just mentioned, so you'd have a commercial catch limit and a recreational catch limit, and then the target is set below the ACT. The whole goal here is so you're prohibiting overfishing from occurring. The AM; well, when you cross over the ACLs, this kicks in the AM, so you mitigate going over the ACL. Again, they could differ by sector, too.

A certain example that we are looking at, in the Amendment 17 Options paper, you can close the fishery, reduce next year's fishing season; or if you go over, you can that off the following year. They're just examples. Now I should put forth here the council has not seen the alternatives at this point, so I am hesitant showing you the alternatives staff has worked on so far, but the council has not seen them in great detail to this point. They will be working on it this week.

Here is a quick example of how this AM could work. You can see this is for the commercial sector, for an example, where you have the quota, which is the Sector ACT; so in year one they didn't reach the ACT so you wouldn't close the fishery. Year two you cross over the quota or the Sector ACT so you would close the fishery as soon as you cross over the ACT. In year three you would close the fishery when you crossed over the ACT, but you would also take off how much you have gone over it in year four.

This is just one example of one alternative that staff has put in the document for the council to look at, but this kind of outlines how this ACT and ACL and the AM could all work for one sector. The task here, as you all well know, is to set the OFL and the ABC for these twelve species and two species groups. Those are outlined on Page 13. The species groups are the shallow water snapper grouper and the deep water grouper unit.

Finally, two more slides; this is taken straight from the proposed rule. OFL is the amount of catch that corresponds to MFMT applied to a stock or stock complexes abundance and expressed in terms of numbers or weight of fish. So pretty basic, you could tie that to the yield at the MFMT. We do have some information in your roadmap that shows the various MFMTs, the yield at FMSY, that's a good starting point for this group to work on. We also have trends reports in there and various papers.

Finally, the ABC, acceptable biological catch, which this group must set according to the MSRA; level of a stock or stock complexes catch each year that accounts for scientific uncertainty in the OFL and should be specified based on the ABC control rule. So, the difference between the OFL and the ABC should deal with scientific uncertainty, and it could be the same as it or it could be separate. That's up to this group to decide. That's a quick rundown of what we're looking for here, and I'll be happy to answer any questions.

Dr. Cooper: Have we established an ABC control rule?

Mr. DeVictor: No, the council has not established an ABC control rule.

Dr. Cooper: So how are we going to set ABCs when they have to be set based on the ABC control rule?

Mr. DeVictor: That's something for the council to discuss. This idea of an ABC control rule, as far as I understand it, has just come up in the proposed rule, so the council has not had a chance to discuss ABC control rules.

Dr. Cooper: Right, but you're asking the SSC – if you can show your last slide, the SSC is supposed to set an ABC based on – since we're doing this all in ACL language know, you know, whatever ABC we set is not necessarily going to be same ABC either in number or in process that comes up a year from now, right, because according to the revisions in this new proposed rule, we're supposed to have an ABC rule. Hopefully, that's going to be on the agenda for discussion at some point to figure out what ABC control rules are rather than just have us decide on our own through ad hoc procedures.

Mr. Carmichael: Well, an ABC control rule is defined a little different than a control rule that most of you might be thinking of, which was an overfished control rule. An ABC control rule from the proposed rule says a specified approach to setting the ABC for a stock or stock complex as a function of the scientific uncertainty in the estimate of OFL. I'm looking at Page 63 of the proposed rule.

Dr. Cooper: Right, and my understanding of that in its loosest sense is that we have to set the ABC relative to OFL in a consistent manner across all stocks based on the uncertainty and other biological considerations; and so if we want to follow the intent of what I think you've just read is that we have to be consistent; and that the difference between an OFL and ABC, the logic has to be the same.

The numbers and the size differences don't have to be, but the rationale behind it does, and so we're going to have to be very clear if we are wanting to adhere to the intent of the proposed rule, which it sounds like the council is wanting us to start doing, that our logic is consistent across species relative to uncertainty and other biological things.

Mr. Carmichael: I don't think your logic has to be consistent across species as much as your logic should be consistent relative to the scientific uncertainty. You may have one rule for establishing this when you have a quantified, approved stock assessment, and your ABC control rule may apply a different level when you do not have an assessment, or it may be tied to an aged-based assessment versus a production model assessment.

Dr. Cooper: That is what I mean by consistent across species. It doesn't matter what species you're looking at; it's what is the information you have, what is the uncertainty, where is it

coming from, what are the biological considerations? And as you change species, it's the process and not necessarily the name of the animal.

Mr. Gregory: We always have been setting ABC on a stock-by-stock basis as we do a stock assessment and submit information to the council. This ABC control rule on Page 65 that Andy is asking about, I don't know what to say about it. It's like an impossible task. It will take a year minimum just for a group of minds to figure out what a control rule would be across the stocks when we have such a variety of data.

I mean, we don't know what the uncertainty is in – I mean, let's take mutton. I mean, Luiz knows it inside and out. How does the level of uncertainty in the mutton OFL estimate relate to a level of uncertainty we have for the yellowtail assessment or for the gag grouper assessment, and how would we adjust ABC relative to OFL across those small suite of species? To me it's an impossible task, and it's very subjective because there is no objective analytical way that I've seen that gives us that uncertainty envelope.

Mr. Carmichael: Then perhaps you simply set ABC at the yield as MFMT and set it equal to OFL if it's an intractable problem; or, you pick a number. It's the judgment of this group to come up with how you're going to deal with the scientific uncertainty to establish ABC. OFL is fairly clear; it's the yield at MFMT. You then have the opportunity to reduce that in specifying ABC.

ABC now has a different description than what it had in the past. Previously ABC was fairly open. It wasn't explicitly described, and now it's described explicitly to account for assessment uncertainty, so it may be nothing more you need to do than say when we a quantitative assessment, we're going to set ABC at MFMT; and when we do not have a quantitative assessment and we're relying on landings alone, we're going to set it at 75 percent; and when we have landings and a survey that we can use to monitor the fishery, maybe we'll set it at 85 percent.

I think you can't overcomplicate it because what has happened to this group for the last three meeting is that you have overcomplicated the issue of yield at MFMT and ABC; and as a result, we are up against the wall now and must have these regulations go in, and the council must have these recommendations now, and we've gotten very little guidance from the SSC as to what you would like.

If we continue to say, well, this is going to be impossible to do, then perhaps the Secretary the will end up taking over this plan and the entire council and SSC will be left out of the loop and won't have anything to say. I think you have to simplify looking at what you have and try to move forward.

Mr. Gregory: But that's difficult to do when you're given guidance that you set up a system, a process. I agree with you, if we can come up something simple – and I am sure that would be the end result – but no change in the process of the Magnuson-Stevens Act has ever been accomplished easily, and this is paramount to SFA, and these guidelines make it even more

complicated than the literal interpretation of the Act itself. I was going to say the uncertainty about the uncertainty is so uncertain we can't define the uncertainty, but you're saying I can't think that way.

Mr. Carmichael: I'm saying if you're so tied up in the uncertainty you can't move forward, then ABC equals yield at MFMT and you leave it that and move ahead.

Dr. Barbieri: Doug, yes, there is a lot of potential for us being subjective here in making these decisions, but it's not really much different than some of the other biological reference points that are being used now in defining not necessarily MSY but OY and some other biological reference points that we use where we make a judgment call on how much cushion we want to add there to be a buffer, right?

Mr. Gregory: Right.

Dr. Barbieri: So, I mean, in a way we're basically using kind of the same type of process just to come up with a different set of reference points to get different names.

Mr. Gregory: That's my point, the old process took two years to develop, and it came out with a simplistic default rule of 75 percent of FMSY, but it took two years to come with that. If we can cut to the chase like John said, that would be great. Meanwhile, I'll get out of the way.

Ms. Lange: I agree with John. The basic thing that needs to be done is to set up the protocol. The more information we have – and I'm new to the committee so I don't know the full range of what data are available, but certainly those stocks whose assessments were deemed to be adequate are better off. We have more information and we can be a little more certain of the status of those stocks than we can the ones that we have no catch data or whatever.

The first task, I would think, would be to set up that range. It may not encompass everything but certainly the least known stocks versus the most well-known stocks are the extremes of the range. To be able to then, based on some – it may seem arbitrary at first, but a level of certainty than can be applied in a percentage, and just be very specific in why those percentages were selected; you know, why was 75 percent selected because of the lack of information.

And as long as it's clear on what thoughts went into the process on why these certain ranges were used, to start off, and I don't think that anything needs to be locked in stone. If more information becomes available for each of the stocks or for several of the stocks and another option becomes available in a year or two or three or five years from now, it doesn't mean that the ABC control rule can't be modified. I think something that needs to be done based on current knowledge with the understanding that as more knowledge becomes available or more understanding, it can be modified.

Dr. Williams: There will be more comments from me coming, but for now let's just nip the one idea that OFL can equal ABC in the bud right now. Page 27 of the guidelines states, "Because the primary goal of the MSA and management responsibility of NMFS and the councils is to end

and prevent overfishing rather than account for it after it occurs, NMFS believes that a good approach to management is to have OFL greater than ABC and ACL greater than ACT. The ABC is lower than the OFL to address scientific uncertainty in the estimate of OFL.” I don’t think it’s appropriate to consider OFL equal to ABC.

Mr. Carmichael: One pound is lower, though, and they don’t give guidance beyond that.

Dr. Williams: Well, to that point, then, let’s get into the meat of this thing. Let’s refer to Page 10 of the guidelines which actually starts to give us some guidance on possible percentages to prevent overfishing. There “NMFS proposes a performance standard such that if a catch of a stock exceeds its ACL more often than once in the last four years; i.e., more than 25 percent of the time, then the system of ACLs, ACTs, AMs should be re-evaluated to improve its performance and effectiveness.”

In other words, that bare minimum from what I’m reading there. Then they go on to suggest that “a higher performance standard could be so that the catch does not exceed its ACL more than once in every five or six years”, which is a 20 percent or one-sixth suggestion for a percentage of overfishing.

What we did with gag, if you remember, we didn’t call it an ABC, but we looked at the table that Kyle had produced where he did an estimate of the uncertainty in the probability of overfishing. There a 75 percent of FMSY reduction corresponded to roughly about 30 percent probability of overfishing, so that would even suggest that what we did with gag was not necessarily precautionary enough, given this guidance right here.

Mr. Carmichael: However, that ACL and OY that gave you the 30 percent, so that’s not that far from 25 percent given the uncertainty in assessments, in my mind, and that doesn’t address the issue that’s before this group which is specifically MFMT yield for OFL and ABC. That’s ACL so you could recommend that the council adopt an ACL based on an FOY that’s 70 percent, perhaps, in the case of gag which would be achieving this, and you’d still have your yield at MSY that would be the overfishing level.

Dr. Williams: To that point again – and, darn it, I didn’t mark that page, but there is language in here that says that the expectation is that ACL will more than likely be set equal to ABC. That is the expectation. I’ll find that eventually and give you the actual page where that is, but it specifically mentions in there that they expect that to be the common outcome. If that’s the case, then we need to realize that the ABC we set could just as easily be translated into the ACL.

Mr. Carmichael: So your control rule could be when you have a quantitative assessment you establish an ABC that only gives a 25 percent chance of overfishing. You said the gag was 30 percent, so you establish an ABC recommendation based on the 25 percent, and you still have existing out there the yield at OFL. I guess I don’t have any disagreement on that, OFL is yield at MFMT.

The question is how does the committee deal with the ABC and what will the council ultimately do? On the one hand, the council could go lower than ABC for ACL. The question is whether or not the council will go lower than ABC. If you present it in terms of what you believe is a reasonable level based on perhaps the 25 percent, then maybe there is no grounds for the council to go any lower, and they'd be happy with that, and I think that would work.

Dr. Williams: And I don't disagree with that all. In fact, that's a nice starting framework probably. The one thing I'll stress, though, is the whole language throughout here is stressing preventing overfishing. In my mind – and people can disagree with me on this – we have to express our ABC control rule in the sense of probability of overfishing, so we need that information, I think, to go forward because otherwise you are sidestepping the whole issue of you don't know whether you have a one-in-four chance of overfishing in a given year if you don't have that worked out in the sort of population dynamics stuff.

Ms. Belcher: Christine, do you have anything to Erik's point?

Ms. Burgess: Well, yes, that's what I was going to ask was about the probability-based approach to setting these limits. We don't have those estimates now, but as far as establishing some protocol for setting these limits, that seems like a good way to do it. Then there is that other paper – this is out of the LENFEST Report, Appendix D – by Alec McCall on data-poor situations. So, using those approaches to setting these limits in the future, but we don't have this information now. In order to get these probability-based approach results, you have to redo the assessment essentially to get those answers?

Dr. Williams: It will definitely require some additional work, and we don't have the information to make that decision in front of us at this time.

Ms. Burgess: Right, that's what I was saying and I was just trying to figure out how much work it would be to get that? That's going to be long-term goal for every species or is that something that can be done in a short period of time?

Dr. Williams: Yes, this is where I walk the fine line. I don't want to speak for workload issues for the Center, but it can be done. We were able to do it for gag with a little bit of effort. That was one species, but to go back it all depends on how well we felt like we characterized the uncertainty in the assessment itself. That would have to be re-evaluated for each assessment, I think.

Dr. Cooper: Okay, while I agree the probability-based approach is kind of the gold standard, I think it's going to be while before we can use that on many species, and we're kind of stuck having to make our best decision, and I think sticking as much to the intent of both what the council is asking for and what the proposed rule is, and so I see nothing wrong with an ad hoc approach for setting ABC relative to OFL based on our understanding of the uncertainties.

One question I have, because, really, until the Comprehensive ACL Amendment, these are the only ABCs we're setting, right? Okay, what do we know about the – not the absolute – the

relative uncertainty across these assessments? If these are all equally uncertain, then, guess what, we just do the same thing for each species relatively; not necessarily in absolute terms, but we don't necessarily force ourselves to be so much more conservative for the uncertainty in one versus the other.

I do think we are somewhat in a corner to pull numbers out that we think appropriately accounts for uncertainty given what we know of the assessments. The thing that we're also overlooking is it's not just the uncertainty in the assessments, because OFL is FMSY times current abundance. Okay, that's current abundance. We need to have an idea of what that is. That's how you get yield, and that's based on projections, which are based on lots of assumptions.

So we're going to have to make our best estimate. I don't we're going to be able to be very formal and very quantitative about how we're doing this. I think we're going to have to be consistent and just make sure that we're doing what the intent of the policy is for now, and then hopefully, when it comes time for the Comprehensive ACL, we get down and really start figuring out the nuts and bolts of this.

Dr. Williams: I disagree a little bit in the sense that a lot of resources and effort goes into each of these assessments and then to basically end the whole process with an ad hoc measure for setting the catch really I don't think is going to sit well with a lot of folks and could, frankly, generate some lawsuit issues.

If, for instance, you have a situation where you have a full-blown assessment, that all it would take is a little extra effort to go back and recompute the probability-based approach, and it could be done but it just hasn't been done at this point in time, aren't we skating on thin ice by going forward with an ad hoc ABC?

Mr. Carmichael: Might I remind the committee that the council has been asking you for comment on these things and for what you would like to see to address these things I think for three meetings now. It's not necessarily ad hoc to agree to a rule and perhaps say we're going to use the projected yield at 75 percent of FMSY as our ABC. That doesn't neglect the assessment.

You know, the gag thing has been done for a while, but we've had over a year to try and get more species done through the probability approach. The council is simply out of time. I think many on the committee supported that the first time it was presented, and we have not made any progress on that.

Unfortunately, I don't think the committee really has time to wait for more analyses that may or may not be forthcoming depending on what other obligations the science center has. That's kind of problem. I think you have to deal with what you have before you because we just simply have spent a year not making any progress and getting any of that done.

Ms. Lange: Erik or everyone, what would prevent us from stating that the ABC control rule would be based primarily on a probability analysis when available; and if not then the next layer of uncertainty, then the next and the next? Again, the range I was speaking of, the highest one

would be having that analysis and we'd at least be able to move forward with something; and as the stock assessment incorporated the probabilities, we could move to that level, that higher level of lack of uncertainty or less uncertainty.

Dr. Cooper: Anne just said it perfectly.

Ms. Burgess: I third that. I mean, that's kind of what my point was. Is what we're supposed to be doing now is coming up with some sort of protocol to ideally be able to set these limits; and then realizing that we don't have that probably now, just coming up with some sort of secondary way of doing this?

Mr. Carmichael: Short term you have to come up with limits for these species in this table. Half of them have assessments. Half of them you have landings and some CPUE. Long term I think, yes, you have to comment back to the council for the Comprehensive Amendment for dealing with the ABC control rule and how that is implemented and for getting the probabilistic approach incorporated into future stock assessments so we can deal with that..

Mr. Burgess: Shouldn't that be done at this meeting so we can get the ball rolling on that?

Mr. Carmichael: Yes.

Dr. Williams: Yes, I think we should proceed with establishing an ABC control rule. The only thing I will add is that if we try to proceed with the species that we have, even those that have been assessed, with what is presented in front of us is no different from just taking a bunch of means and imposing some unknown variance on them, and that just has no scientific merit whatsoever, in my mind, and so just be careful about – any ad hoc approach that's essentially what you're doing.

We can get the uncertainty estimates from these assessments given some time, and the question is when? I don't know; I can't answer that question, but it could be done at some point in time. That's the issue I have is us going out on a limb, making some variance assumption, setting an ad hoc level, and then later on down the road having it catch up to us.

Let me put this way. We got ourselves in trouble – this was before my time – already with these other listed overfishing species, red grouper, black grouper, speckled hind and warsaw. Look at what happened with those. We went forward with an ad hoc approach, a per-recruit analysis, listed them as overfishing and now look at what we're stuck with. I mean, we could potentially get ourselves down that same road with going forward because we're under pressure to fill in some box and get us stuck in a corner again.

Dr. Cooper: Part of it is right now I don't think we actually make any statement when the set the ABC about the effectiveness of preventing overfishing in that ABC. For one, I mean, going back to the guidelines, that 25 percent is ACT relative to ACL, which they then say is probably close to ABC. It doesn't say anything about the probability of exceeding OFL. The accountability

measures kick in when you go over ACL and hopefully that's far enough that you're being precautionary.

I don't think we're going to be able to make any guarantees of what we're setting will achieve a particular probability of overfishing or not overfishing, whichever way you want to look at it, without really digging into the documents behind all this, because, yes, then you're just picking some variance. I don't think we want to make those promises until we can actually support them.

Just like we have along, if we don't have the documentation to say there is a 50 percent chance that this ABC – you know, if you fish at ABC, that you'll avoid overfishing; we can't make that statement nor should we. The one problem I have also is that – I mean, the probability approach is fantastic, but there still are a lot of things that need to be figured out about it.

For instance, when you have a retrospective pattern in the assessments, that means your estimate of biomass is likely biased, but you're not sure. There is no guarantee. Okay, well, how are we going to incorporate that uncertainty? Right now we don't know why we get retrospective biases, but that's part of the thing that goes into when we start saying adjusting ABC for uncertainty.

Well, that's because maybe our estimate of abundance right now – you know, the stock assessment has been under-projecting so maybe we need to adjust for that. It's not something that we'll be able to automate. That's something that, yes, it could be subjective and we need to debate those issues, but I don't think we can simply turn to the Center and say, okay, we would like you to run the probability approach and come back in a month, even if they decide to throw all their resources at it because there are a lot of unanswered questions, and so we still verify something that didn't account for a wide variety of things.

I think it gives us a much better answer, but I don't think we should be sitting here and waiting and saying, well, do nothing. Anne said it perfectly. I think we can put some numbers down, put in the caveats of how we got those numbers. This amendment has a long way to go, you know, just like they did in 16, council staff is going to have to justify why the choice of that number will actually adhere to the law.

Right now we're going to have to – you know, council wants a number, we can give them a number, we can put our rationale down. If they have to actually adhere to some certain probability level, well, guess what, we're not going to be calculating those right here; we can't. But, at least they can get a number down and council staff can get working on it. That's my take.

Mr. Waugh: From the council's perspective, what we are looking to get from the SSC is the overfishing level and ABC specification for those ten species that are undergoing overfishing by close of business tomorrow. Anything less will be a resounding failure. We have spent over a year kicking this around.

The legal deadline we're under is to have this amendment in place by January 1, 2010. We will be approving a document for public hearing probably at the December meeting; final approval at the June '09 meeting. This is your one and last chance to provide those numbers that congress dictated that you provide. Certainly, there will be opportunities to refine this in the future. For Amendment 17, for meeting that January 1, 2010, deadline, this is your opportunity.

Dr. Cooper: Just for the record, if my memory is serving correctly, the thing that we kept kicking back was the request to set ACLs. I don't seem to remember being asked to calculate OFLs and just ABCs. It was the concept that we were being asked to actually give numbers for ACLs, and yet no one could give us guidance, NMFS or otherwise, as to what an ACL actually was.

It's not that you guys have been asking for OFLs and ABCs and we have been saying, no, we're too busy. It's that up until a week ago we weren't even being asked for ABCs. We were being asked for ACLs with no real definition, so I don't want it to come out that we've just been shuffling our feet and being reluctant. The goalpost keeps changing. What we have been asked for, which doesn't negate the fact that this is our last chance to give ABCs, but we need to keep in mind that we weren't asked for ABCs at the last meetings. We were asked for ACLs and we've kind of said, "Well, what do you mean by that?"

Ms. Belcher: We actually gave ABCs and OFLs in December.

Dr. Cooper: Okay, even more to my point, then, we have been working on them and we are just now getting to be sent species.

Mr. Waugh: Go back to the Magnuson Act; the Magnuson Act hasn't changed since it was finished by congress and signed by the President. It's not going to be productive to point fingers and we did or we didn't or when we did or when we didn't. We've got two blanks that need to be filled in for these ten overfishing species by close of business tomorrow. Let's get on with the work.

Ms. Burgess: If we fill in those blanks at this meeting and then we are able to come up with some of these probabilities of overfishing within the next few months at least for one of the species, perhaps, if not more, then when we reconvene in December can we change the ABCs?

Mr. Waugh: It will be very difficult for us to handle that within the context of then and having all the analyses done, all the social and economic impact analyses done for the council to have a document before them to approve for public hearing at December. There is a tremendous linkage of the management implications of these numbers, and I don't think we would be able to modify those analyses at the December meeting.

That's why it's so critical that we get these numbers now because we need some preliminary guidance from the committee and council at this meeting; final directions on alternatives to be analyzed at the September meeting; then the team does all the detailed social and economic

impact analysis for presentation at the December meeting. Anything that you all do after this meeting could be addressed in a future amendment, but I don't believe Amendment 17.

Ms. Lange: I guess my question goes back to if we were establish an ABC control rule today that said that the highest level would be one that incorporates the probability approach, the next level would be whatever is decided, and then a specific number was provided for each of the stocks, based on that – I understand what you just said, Gregg, that there would be additional analyses, but if the number could be changed, if the Center was able to come up with the probability approach for two of the stocks or three of the stocks, you're looking at – I guess I'm not sure about how much difference the analysis would be. If the socio-economic analyses were based on just one number, do they not use ranges or is it that much of a point estimate for everything?

Mr. Waugh: I think we have some of the NMFS team members in here, if they want to jump in and discuss this some as well, but with these species and the linkages in terms of the regulations that have to be developed, I think it would be very problematic to deal with any changes in those recommendations after this meeting.

Dr. Cooper: Thank you for pointing me to Page 21 of our current roadmap which outlines the decisions we made last December. Yes, we set ABC and OFL for two species; and rather than me going through the minutes of the last meeting, perhaps we were able to agree on those numbers, why not apply the same process to the current species in front of us?

Dr. Williams: Because we had the probability analysis in front of us for gag.

Mr. Carmichael: You did something for vermilion.

Dr. Williams: That was on rebuilding schedule, which is a little different.

Dr. Buckel: Gregg, I had a question about the vermilion snapper; I guess there is a plan in place that if the numbers changed with the new age-based assessment, that things can change in that amendment, so could not that same process be used here if the numbers changed based on a new probability approach if we did get to the top tier, using Anne's language?

Mr. Waugh: Yes, that's a good point. We would be in the same position we are with Amendment 16 now where we would be going forward with an analysis based on numbers from the existing stock assessment, and we could try ahead of time to build in an analysis that would address that new stock assessment when we get the values.

That's going to complicate it, but I guess once you all finish with reviewing the new stock assessment in December, the numbers that would be in Amendment 17 would no longer be considered best available science, so we're going to have to figure out how to accommodate that ahead of time like we're doing in Amendment 16.

Mr. Carmichael: I think on one hand people have been expecting a revision to vermilion for quite a while, so there is a certain workload planning that goes into that. Now if you were to add a whole bunch more at the last minute that would probably make it more troublesome. Perhaps you could have this done by September.

You could meet via conference call in mid-August and agree to something and have it discussed and presented to the council as a refinement when they bring this up in September, and that would give a larger window for getting it accommodated. It may actually turn out, though, you've got to realize how the council works. It would be probably be something where you'd have to have a conference call in July to actually have it incorporated in the briefing book and everything else and have it carried through.

So the question is between now and July what is the chance you're going to have a probability estimate for any of these other species that have been assessed? Based on the fact that we have gotten nothing but gag so far, I'm not optimistic but correct me if I'm wrong.

Dr. Cooper: What is the rationale of choosing FOY at 75 percent FMSY for the council? There is none?

Mr. Waugh: No, that's the technical guidance document that provides the agency recommendation on guidelines for a default if you don't have any particular other methodology. Our council, in an attempt to be as consistent as possible with the ever-changing guidance on Magnuson, adopted the exact process outlined in the technical guidance document.

Dr. Cooper: Okay, I'm thinking out loud here; it may not make any sense whatsoever. We have yield at FOY for all these species. My guess is if we fish at FOY there is going to be a not large chance of overfishing, and FOY is probably reasonable adjustment for uncertainty, possibly, maybe. It's a number.

I would feel comfortable simply stating that in lieu of more formally established control rules, setting the ABC to yield at FOY, which we have, as reasonable first step, especially since if council sets the ACL at FOY, they then have to set their ACT so as to not exceed it more than one in twenty-five or one in six years, so we have got yield at FMSY, which is OFL; we have yield at OY which may serve a decent proxy for an ABC for now.

It is something that is consistent with previous guidelines and number we have. No, we can't make guarantees we won't do overfishing or it guarantees that we're accounting for all nature of uncertainty, because we never will, but I'd be willing to say it's a reasonable proxy for ABC given the council can set ACL equal to ABC, and then all they're adjusting for is management's uncertainty in setting ACT. So if they actually have really good management, you can fish pretty darned close to FOY, which is the intent of the revision. It's an idea; it's a strawman; rip it apart, but we have the numbers and we can move on and talk about it.

Mr. Gregory: The current definition of OY is arbitrary, and it came out of the NMFS Technical Guidelines Control Rule after a couple of years of thought and discussion within the agency.

The end result of all that – and that’s why I was being a little fictitious at the beginning – the end result of all that was this arbitrary default recommendation; well, maybe 75 percent of FMSY is a good OY.

I mean, there is no science behind that at all, but that’s the conundrum we’re in to try to meet all these little control rules that emanate from congressional actions. If you look at the way that’s been sold to the council is that if you look at the yield at F of OY and the yield at MSY, they’re not much different, but what the council should be looking at are the two other factors.

One, that it’s a 25 percent reduction in fishing mortality, fishing effort, which they typically translate into a 25 percent reduction in catch from MSY; and, what is the population size between MSY and OY? I mean, that’s where we should coming from; is the population healthy or how healthy is it, is it too healthy, if there’s such a thing. My concern about what you’re proposing is that I feel, in large part, that this 75 percent of F or MSY for OY, not only is it arbitrary but it’s quite conservative.

If we go forward with that as the new ABC and the council is then forced to set a target below that, we’re going to be reducing the fishing mortality rate from MSY by 35 or 40 percent, which borders on it being an underfished fishery in some instances. We do need to understand what the dynamics or ramifications of all that are on the public and on the fish stocks itself and not just come up with more arbitrary things.

Dr. Cooper: The thing is we need to pick a number. If you have a method for picking a different number, I would love to hear it. My rationale is this. For the commercial species for which there is a quota, when it’s in-season management and there is no probability of exceeding – you know, you can hit the ACT on the dime just about everytime, guess what, you can set that ACT just about to ACL.

And if we choose FOY as our ABC, the council can set their ACL right at ABC; so for the commercial industry it’s not going to change. They’re going to be fishing at FOY if there is in-season management, quota control rules, and you can shut the fishery down when they start going over the quota.

Now, for the recreational it’s different, but your suggestion that all of a sudden we’re going to eliminate fishing or have an underfished species by setting the ABC to FOY, I don’t believe that. At least for the commercial, no, we’ll be fishing right at FOY, and that will be consistent with the intent of the rule. If you’ve got good monitoring, you can control the landings, your ACT can be right at the ACL, and you can set your ACL right at the ABC.

If you don’t like FOY, FOY plus a number, you know – if you can be able to come up with a less arbitrary approach, please do. I’d love to see it, but I’m throwing this out there as, hey, we could put it out there and we throw caveats. We don’t just do a one-sentence motion of ABC equals FOY from here on out.

We say just like the motion back in December, given all the – you know, paragraph – given all the uncertainty and the lack of a official process, until such a process has been defined, you know, or for the next year we believe this is an acceptable approach. And, contingent on the fact that there are some fears that perhaps this is overly conservative, we recommend what we feel is right. The council can then do whatever they want.

Mr. Gregory: The council cannot exceed ABC.

Dr. Cooper: If they want to follow the proposed rule that is not yet in effect.

Dr. Jiao: I have a suggestion. I think for a species without a probability-based stock estimate, we can use our previous management experience. For example, if we use OY as our ABC value and use based on experience value, like, for example, 0.75 in the last five years or ten years, and we find that the management strategy by using those experience values turned out to be very good, then we can continue to use those experience values. But if those experience values turn out to be too risky, then we can decrease the number of values.

Then for a species with a probability-based stock assessment, again we can use previous management experience. We can do a stock assessment and say in the last five years the probability that was used for the management is 30 percent, for example, or 30 to 50 percent, and it turned out to be good, then we can continue to use risk value, so we can use 30 percent. But if it turned out to be too risky, then we can decrease the P-value. For example, we can decrease to 20 percent. It's just a suggestion.

Mr. Carmichael: To that for just a moment, that's a really good suggestion, and I think that fits in with everybody is saying about you set up with some ground rules here; you see how they work out over time, and it doesn't necessarily lock you in to something for the long term. That seems pretty good.

I just want to thank Doug for taking us into the realm of compromise because he is making the argument that the ABC is FOY is perhaps leading to underfishing by the time it's carried through. I think others have made the argument earlier that ABC equals FOY is exceptionally risk prone or not perhaps adequately risk averse, so, clearly, I think maybe you are in the realm of a reasonable compromise when you're using FOY at 75 percent of MSY.

I guess what has puzzled me in watching this develop over the last couple of meetings has been the SFA went in, in what, '96 and this committee has made recommendations for many, many species over many, many assessments for an FOY at 75 percent of FMSY. The council has come with many amendments and many plans and said what is FOY, and the committee has supported 75 percent seems great.

I don't understand what is in the rule that suddenly 75 percent of MSY for FOY is suddenly skeptical; it has no basis; we shouldn't be using this. There is nothing in this law that changes that. All it says is give stuff in poundage now and the council shall not exceed it. Essentially that's all that it's doing. I mean, there is nothing in here that questions that. I think everyone

kind of feels – my perception is the history of this committee and the council and everything shows that people are fairly comfortable with FOY being a reasonable compromise.

I personally believe more of a failure is in not getting our fisheries to FOY; not that FOY doesn't work. I don't think we have enough examples in this region of fisheries operating at FOY yet to really start to shed doubt on whether or not fishing at FOY is reasonably conservative. It looks like when you really do fish at FOY, you get progress. A lot of fisheries show progress when you can just get down close to FMSY. I don't think we need to worry too much about second-guessing our FMSY. We need to focus on how do we deal with those fish without any assessment, because that should be where the real argument is.

Ms. Belcher: Thanks, John. That was kind of trying to draw everybody back in again. We had gone through this back in December to the point where at least, obviously, we were happy enough to put numbers down on paper. I mean, we deliberated it for well over four hours the first day. Again, I completely understand about the issues of absence of guidelines and we need a better focus.

Maybe our arguments are better served having an actual focused meeting to hash this out. For us to actually try to come up with a framework and lock it in at this point is not gaining us any ground on what we're being asked to do. We were willing to pursue what we did back in December. We actually have an OFL and an ABC for both vermilion and gag. Why can we not just see if we cannot apply the same methodologies for those species that do have assessment data so that we can at least give Gregg six out of ten species and spend this time arguing over what about our data-poor ones.

The data-poor ones are the ones that are really going to kick our hinnies over the next however many hours you want to deliberate it. I'm not taking away from it; I agree that we need to have a better framework. Everybody's comments are well suited, but, again, we've already started on it; we got our foot on the first step in December; and now we're completely back on the landing again.

Let's see if we can't get some of these numbers down. Again, all the comments are great, I agree, but I would like to see us better request our time, that we have this much time if not more to get all of this out and get it in a formal framework. It that's what it takes is one day, two days of us getting together as a group and locking ourselves in and coming up with it, then that's what we need to do. Doug.

Mr. Gregory: In response to John, I've been opposed to the arbitrary 75 percent of FMSY since it came out in 1997 and '09. Of course, I've been in the minority. I thought we should put – you know, OY I think had its origin as the maximum economic yield of a stock production curve and optimum yield I thought should be something that was scientifically based and not an arbitrary thing, so that's why I opposed that 75 percent.

At the same time that was coming out, there was also a National Science Foundation or National Academy of Science study on the stock assessment methodology used within the Service. It

concluded that if you have a generated stock assessment, generated data where you know what the results are and should be and you give that to each of the laboratories around the country, you come up with a different answer depending on which laboratory you sent it to, and the answers varied by more than 50 percent.

So, this false sense that we can recognize a 25 percent difference in fishing mortality or something with the models that we're using in our stock assessments is false. The models are not that good and the models – and so the whole process does tend to be somewhat subjective and that's my resistance to accepting arbitrary things and going forward with it and making believe that we're doing something scientific with it.

I like the probability approach. I don't think we have the stock assessment data in front of us to do it for these species today. If we can accept something arbitrary as a holding pattern until we get the stock assessments for the species, much like we did with the overfishing definitions where we went from SPR to something else, and if NMFS accepts that.

That's a real bugaboo; what will NMFS accept and not accept, and then what happens if they reject the council's amendment and we don't meet the 2010 deadline because of that? And I ask the question, you know, I feel a little imposed upon that congress passed this two and a half years ago.

We've got a year and a half to the deadline and we've got proposed rules, not final rules, and they can change between now and the final rule, and here we are being told we've got to do this. What if it doesn't get done? I don't like being forced into a box arbitrarily anymore than I like arbitrary management reference marks.

Ms. Belcher: I have a question for Erik. What is going to happen with the vermilion relative to this probability modeling? Is it going to be in the current benchmark that's being done; has it been considered as part of the upcoming benchmark?

Dr. Williams: We haven't formally been asked to do that, but, yes, we probably will start doing it basically from now on now that we have some rough guidelines in place. Part of what we're waiting on is to see what the SSC wants to use as an ABC control, because in a sense the stock assessments need to react to the information needed for management, but we need to know what is needed for management.

I mean, I haven't even heard a firm endorsement of the probability approach from the SSC yet to know that is what we should be doing with our stock assessments, so that we can provide the numbers for this committee. I'll comment on some other things that were said. John is oversimplifying what this new Magnuson Act – yes, it is in a sense simplifying things to poundage that we manage by, but there is another clear intent in this, and that is to prevent overfishing, and there is this concept of increased uncertainty means increased precaution.

If there is any region in the country that has the most uncertainty in their fisheries data, it's the southeast. And to think that 75 percent FOY works, look to the other councils and see how well

it has worked for them. It hasn't worked very well. Now maybe they haven't managed to it properly either, but it doesn't have a good track record; so to say that it's a good ad hoc approach – plus, we even have in hand one data point, gag, that suggests that 75 percent FMSY is not – it doesn't get us far enough.

It only gets us to the 30 percent probability, which if we go by the other probability statements in the guidelines, it suggests it should be lower than that. So, one data point we do have says, no, 75 percent FMSY is not good enough.

Ms. Belcher: But getting even 30 percent is better than being at 50 or 70 percent. I know that sounds simplistic and stupid, but it just to me, again, I know what we're arguing for and at the same time –

Dr. Williams: Let me add this, then. The other thing is let's not forget who we are and what we are. This is a science committee; we are scientists. We may have our feet held to the fire and they may insist we put a number in a box, but, come on, it's got to be scientifically defensible. We cannot do something that's not scientifically defensible. Our reputation will be shot as scientists and as a committee.

Mr. Gregory: My only other concern about Andy's approach is that for so long we've talked about targets and limits must be far enough apart to be recognizable. Now I agree that this says that the target can be equal to the limit, but that's going to be difficult for anyone to get approved given the history of trying to separate targets and limits so that we get more precautionary management.

Dr. Cooper: Okay, you are forgetting some of the caveats I threw in there. When you have in-season management and can shut down the fishery completely, then your target and limit can be the same because you've got perfect control and you've got very little uncertainty. For the recreational fishery, yes, you've got to keep your target and limits far apart because there is a lot of implementation uncertainty.

But also keep in mind the thing you just said a little bit ago, you know, we can't tell, supposedly – according to you we can't tell F of OY versus FMSY. Well, guess what, the guideline say you lower from MSY based on uncertainty; so if we can't tell the difference, then we need to be below FOY, so you better hope we can tell the difference between FOY and FMSY. If we can't, then FOY is overly risky. According to what is going to be legal once this thing get enacted, you need to adjust below FMSY to account for uncertainty; and if we have huge uncertainty, guess what that means?

Mr. Gregory: My point was we have uncertainty we don't know about. I agree with your logic about commercial and recreational targets and limits. I'm just saying administratively it's going to be hard to sell a target near a limit given all the years of discussion we've had in management of trying to separate the two to where they're distinctly different.

Ms. Belcher: I've got a question to the group overall, and this is, again, just because we still are getting bogged down in the same thing. Two years ago we were giving numbers forward. We were meeting ABCs, whatever was required of us for them to do management. What has changed in that time period with this language that now all of a sudden even under status quo we will not give those numbers forward?

That's what I don't understand. If it's because now all of a sudden there is this uncertainty that somehow it's coming back on us and no one wants to touch it, again, it was always there. Nothing has changed in that time period, and I'm just trying to figure out what is the language that has everybody stalled that we can't proceed with status quo other than to say we weren't happy with it before.

Well, if we haven't always been happy with it, we still proceeded with it, so why now are we bogging down and not at least willing to give status quo and state that status quo? We know we need guidelines, we know we need a process. We're arguing around the table. Everybody is in agreement on it, but we still have to just let management go forward and how are we going to do it? Why is there a problem from two years ago to now that we cannot even proceed with status quo? That's just a frustration question; why can't we?

Dr. Williams: The simple answer is because status quo has failed us across the country. Look at how many species are overfished and overfishing, particularly in our region. It's got a poor performance track record, and 75 percent FMSY was completely ad hoc, but it was fixed in the system and so people did it, and we computed it, and we went forward with it, but because it was in the system.

Now we have more flexibility with this. We have the ability to actually attempt to account for uncertainty and be precautionary. That's the big difference and it is a big difference. It's a big shift in paradigm; it's a shift in thinking.

Ms. Belcher: And I agree with all of those statements, but my point is still the fact that, again – and now all of a sudden we've gummed up on the process. It wasn't good then; we weren't looking for alternatives before then. Now that Magnuson has written it in that we have to do something different, now all of a sudden we're all willing to come out and say that we didn't agree with it to begin with; we did what you asked, but we weren't in agreement, and now we're stock again.

But, again, given status quo – again, I understand frustration from the council, I understand frustration from staff because there is not a single one of us in this room that doesn't agree that it needs to be better, but we still have to go forward. What are we going to do? We'll be sitting in here – it's already quarter after three. We're not any closer to giving Gregg any numbers. We're not any closer to discussing data-poor species.

We're still debating the same stuff we debated; and, again, we made it to the point of coming up with numbers for two species, and we might as well that up and forget what we did in December and go back to arguing again. I mean, it's not saying it's the perfect solution, but we had talked

about that whole detailed list of putting the caveats into it, putting the limitations into it, saying that in a perfect world we'd be able to give you something that we're a hundred percent happy with, but in lieu of that what other option do we have? I'm deferring and imploring to Gregg as well. Gregg, what do you want us – how do we proceed with this? It's obvious we're sort of stalled.

Mr. Waugh: Well, I don't know that you're at a stall. I mean, you've got on the table a suggestion to have as the OFL yield at MSY; yield at the MFMT; and you've got an ABC as yield at FOY. I would encourage you, when you say that, if you're thinking of the council's default of 75 percent of FMSY, say that, because they can change the FOY definition.

If you all are uncomfortable as some of you are expressing some concern that perhaps yield at 75 percent of FMSY is not conservative enough, then recommend yield at 50 percent; come up with some other number. I would encourage the SSC to think carefully of the vernacular that you used. Doug is repeatedly stating "arbitrary" and that is something that carries legal meaning. To me, the technical guidance we got from NMFS, even if I were to disagree with it, I wouldn't characterize it as arbitrary.

It certainly reflects the collective wisdom and scientific opinion of the authors as would any recommendation coming out of here. As Erik said, you have to look to your own individual scientific reputations and the reputation of this body as a whole, so I would encourage just some caution on the terminology that we're using.

But to me, I think you've got an approach you're talking about and perhaps if you could pick a species to start working through, using this approach for OFL and ABC, maybe that would be a good way to start. Maybe there is some room for using a 75 percent of FMSY as your OY for some species, and you might want to be more conservative for something like gag that switches sexes.

You might want to look at a 50 percent now, but, again, you will have the opportunity to refine this over time. I think at our SEDAR Committee discussions here at this meeting you'll see a recommendation that we add a new deliverable to all our SEDAR assessments that we get this probability analysis so we will have that. I don't think you're as far off as you might think, but maybe picking a species and working it through be a good approach.

Dr. Buckel: Just to follow up on Erik's comment, Erik, you mentioned that at 75 percent FMSY we failed. You know, recommendations coming out of the SSC are one thing, but then what actually happens at the council level or when you try to implement it, it's another. Are you talking about examples where it's actually been an F or 75 percent FMSY that has actually happened and still led to an overfished status down the line?

Dr. Williams: Yes, I mean, New England is replete with some of those examples.

Dr. Cooper: Are any of these species that we're currently looking at on rebuilding schedules, because for vermilion that's basically what we took is we took the landings as the rebuilding

schedule, so perhaps we can pick off a couple of those species and say, well, the rebuilding schedule has to be below FMSY. We've already said that fishing at that level will allow recovery, so for those that have rebuilding schedules in pounds, maybe we could do that.

Dr. Williams: Which that brings up another complication is the setting of this ABC; is this an ABC that's going to be in place for multiple years or just for one year because we do have rebuilding schedules for many of these, and therefore that would imply an annual change in ABC.

Dr. Cooper: I think wording it by the non-motion that's up there right now, that ABC equal to the yield at 75 percent some F level – you know, we do have to set these every year – that we are not setting a numerical ABC that is constant over time, but rather a yield at an F that is constant over some time, which, again, may not achieve the final goal, but it's certainly less risk prone than setting an absolute level and saying this poundage over time will succeed.

Dr. Williams: Yet another further complication is when we say the yield at FMSY or the yield at 75 percent FMSY, are we talking about an equilibrium yield or a yield from a projection analysis? I would say that we wouldn't want to go with an equilibrium yield because oftentimes that's too high; and in which case then if we're going with a yield from a projection analysis, then every one of these is going to have an annual changing value for however long this is going to be in place.

One thing we would need clarified is what these numbers are in this table, yield at FOY, what does that correspond to, the equilibrium yield or is that from a projection and which year in the projection is that from.

Dr. McGovern: I can clarify. There is a handout that we passed around that Andi and I put together, and it says, "Amendment 17, Snapper Grouper Species Guide". The second page of that has some of the same information as Page 16 of the roadmap. That shows the yield at FMSY and yield at FOY for a lot of these species. On Page 3 are footnotes for all those. Of these species that are listed – this says "Section 1, Benchmarks for the Eight Assessed Species – snowy grouper and black sea bass are overfished and they have a rebuilding schedule.

The council has set a TAC for these two species and the TAC doesn't increase. It's just held steady; and so as the stock rebuilds, the TAC remains the same. These yields at FMSY are for snowy grouper, black sea bass, gag, red snapper. They're based on projections as well as greater amberjack. Greater amberjack and mutton snapper are not overfishing. For mutton snapper and golden tilefish, it's assumed that these stocks are at equilibrium because they're not overfished, and there are no values from assessments. Maybe that clarifies a little bit what Erik asked.

Dr. Cooper: Just to weigh in on Erik's question that when we say this, I do believe that we should be basing these on projections and not at equilibrium. The proposed rule I believe says OFL is FMSY applied to the current population size. Yes, that opens a whole can of worms about we're going to need a heck of a lot of projections and we have to incorporate uncertainty down the road. But, yes, these ABCs are going to be changing year after year after year.

Dr. Williams: Given what we have in front of us, the other thing we do have in this is the yield at FOY is at 75 percent FMSY. I'm pretty sure for most of these the stock assessment values are available for the yield at 65 percent FMSY. Given the uncertainty in the uncertainty, we probably are better off going with at least 65 percent FMSY, and we have those numbers.

Mr. Gregory: I've got a question for Erik who is probably most familiar with this. You seem concerned about FOY not working but the example you used is New England. I certainly wouldn't want New England to be used to chastise us. We've got vermilion, black sea bass; we've got a couple of species that we've assessed more than once. Now, did the second assessments show that the first assessment was too optimistic and management failed? Do we have those examples within the South Atlantic Region?

Dr. Williams: I think so, yes. I mean, in the last few assessments we've continually increased the number of overfished and overfishing species over time, it seems like. I mean, maybe my recollection is wrong, but all the last assessments have –

Mr. Gregory: Right, but my question is the ones that we have assessed? See, our definition of overfishing has changed, too. It's gotten more stringent, so just the fact that we've got more overfished doesn't – I'm talking about the ones that we have been monitoring.

Dr. Williams: Yes, I don't know if we have enough –

Mr. Gregory: Have we failed at rebuilding any stocks; not to MSY or OY, but have our management measures not increased the population sizes of fish? We should have some evidence to that one way or the other, and I would use that as a basis as to our success or failure and not New England.

Mr. Waugh: Well, vermilion, you remember the overfishing ratio increase from 1.7 to about 2 point something, so in the vermilion update we were overfishing even more. For red porgy we have relaxed the regulations or proposing to relax the regulations. That one is working. I can't remember black sea bass, where we are with the update relative to the benchmark. We could certainly pull that out. I don't know if John remembers on that.

Mr. Carmichael: I think in the case of something like king mackerel in the South Atlantic, it has performed fairly well targeting an F of OY and largely hitting it in most cases. Most of these stocks started to come back before F even got to OY. Yes, the truth is for most of these we don't have a good timeline. I think we realize that a lot of stocks we've assessed recently are overfished and overfishing because the council has intentionally gone after to those fish and requested them to be assessed through SEDAR that previous assessments indicated were overfished and overfishing.

If you assess a stock that you've determined was overfished and overfishing five years ago, you shouldn't be surprised when they come out as still overfished and overfishing, especially given the vast improvement in our assessment technology and available data that we've experienced

between SEDAR and what we had before when it was said we had SPR and yield-per-recruit evaluations in some cases with ten to twelve fish aged on a fish that might have lived to 20 years old.

So, yes, we have done that, and I think, you know, if get out to FOY for many of our stocks we'd probably be making great strides and actually achieved it without bycatch and discard and everything else ultimately driving you above it.

Dr. Barbieri: How many stocks have we been fishing at FOY – do you guys have this information – and for how long, you know, just for us to have some gauging, because I don't remember off the top of my head.

Mr. Carmichael: As I said, the one I can think of in our region is king mackerel. You have had wreckfish I think that for a while was and now there is virtually no fishing that you were fishing at FOY. Others with the actual quantitative evaluation of FOY, I don't think there are very many. You've got black sea bass which are in a rebuilding stage; red porgy which you may be now – I guess you're still under rebuilding but we're rebuilding pretty close to FOY, and that seemed to be improving. That's about it, though. Our problem is the lack of assessments to allow us to really evaluate it.

Ms. Belcher: So what are going to put forward to recommend on how we should proceed with arriving at our numbers?

Dr. Cooper: I would like to make a motion and then we can go about amending the motion and substitute motions and voting on motions and then debating closure, but to get something official up there, I'm assuming the verbiage is appropriate. **I move that we recommend that yield at MFMT is set equal to the OFL and that yield at 75 percent FMSY, which is the current SAFMC default definition for FOY, is set for the ABC as a reasonable interim step to address the species in Amendment 17 and assessed through SEDAR for gag grouper, for which a probabilistic examination of overfishing is available; establish ABC as a level that provides a 25 percent chance of overfishing as was approved in December 2007.**

Dr. Barbieri: And I'll second that motion.

Ms. Belcher: That level wasn't set at 25 percent, though.

Mr. Carmichael: Do you want me to get rid of that, then?

Dr. Cooper: Yes, just get rid of that, then, "establish an ABC is consistent with what was approved in December 2007". **Okay, I move to recommend that yield at MFMT equal OFL and yield at 75 percent FMSY, which is the current SAFMC default definition for FOY equal to ABC as a reasonable interim step to address the species in Amendment 17 and assessed through SEDAR for gag grouper, for which a probabilistic examination of overfishing is available; establish an ABC consistent with the level adopted in December 2007.**

Ms. Belcher: Okay, we had a second from Luiz. I'll go ahead and open up the discussion and comments. Luiz.

Dr. Barbieri: Well, predicting the reactions, Erik, I mean, I think – well, I think you brought up some excellent points that we need to be discussing as an SSC, but the issue here is how much flexibility do we have really to not get this piece of homework completed at this meeting; and that this we recognize is an interim step and is unsatisfactory to be the final answer but can be a move forward.

I'm not sure if this realistic or not, but maybe we can set up a special time, as suggested here by Madam Chairman, that we have a special meeting, that we dedicate time specifically to discuss this ABC control rule and how we want to go about it. Defining this in one afternoon here in the middle of discussing a whole number of other issues I think is going to be at the very least overwhelming, and it's not going to give us a really satisfactory answer, but we at least complete, using this rationale, this one step to establish some goals and some timelines for us to move on with a better set of criteria for defining those ABCs.

Dr. Williams: To those that put forth the motion, please explain to me what the scientific rationale is for 75 percent FMSY.

Dr. Barbieri: It's just some level based on our professional judgment, some level of variability from that MSY that we feel is acceptable in our judgment to represent FOY. I mean, in reality when we get into the guts of the probabilistic approach, we're going to find, as you know, a whole lot of uncertainties as well. And when we talk about projections with deterministic values, you know, and average recruitment inputs, we're talking about a lot of uncertainties that we don't have any control either.

Dr. Reichert: I've got two questions. One is should we then add some language as to where we currently think that 75 percent was coming from because we discussed that, and I think it's very useful because of the nature of the committee to add some language. The other question was just to make sure we're talking about these species so we're lumping all the species that are mentioned in Amendment 17, including the shallow water species complex and the deep water species; or, are we talking just about the ones – just the ones – okay.

Mr. Carmichael: Just those assessed through SEDAR; that's why that's in there because that basically means those species on the top of that table.

Dr. Reichert: You're talking about the Section 1 Table? Okay, that was just a question that I had.

Dr. Cooper: Jumping back to why do I think 75 percent FMSY is reasonable, in part because the intent is essentially that if you manage the stock perfectly; i.e., in-season management and can shut things down, you should be able to fish at FOY. And as you have implementation

uncertainty and maybe bycatch issues, you have to lower that, but for a perfectly managed stock, which doesn't current exist that I know of, or at least a sector you should be able to fish at FOY.

Okay, if we set the ABC to FOY at least as an interim rule until we can actually figure out what the probabilities of overfishing at that level are, then at least that will maintain some consistency while we figure this out such that those that are well managed with in-season control rules that shut things down, we're essentially saying fish at FOY, which we have been saying all along is an appropriate thing to do. Now, we may be wrong; that's okay. If anyone wants to do a friendly amendment of 65 percent, we could talk about that, too. That's my rationale for setting it at that.

Dr. Williams: One other comment. If we truly mean that this is going to be interim, why not put a deadline of how long we expect these to stay in place?

Dr. Barbieri: Erik, I agree. I mean, I think that if we don't set up some time horizon for this interim to be interim, it's going to slip. It's true, we'd better set something up like that.

Dr. Cooper: Okay, actually put this at the end; "given ACLs must be set annually, this interim approach –

Mr. Carmichael: Is that redundant, ACLs annually? I'm just teasing.

Dr. Cooper: "Must be established annually, this interim approach will be reassessed each year", so essentially we have a year until we have to pick a new method. This doesn't say anything about what method we're going to pick or what we're going to do but essentially next year we get to debate whether this approach was valid.

Mr. Waugh: Procedurally here we're not going to set these ACLs each year. They're going to be set – and in many cases where we've got a rebuilding program, as Jack mentioned, we set these limits to stay in place for a period of time. I think you need to be very careful whether you're talking about coming up with some probability analysis of all the SEDAR assessments that have been done thus far versus addressing this each time we get an update or there is another benchmark, then we'll revamp this. But administratively we can't change these numbers each year. We just don't move that fast, and they're going to stay in place until we modify them.

Mr. Carmichael: Does this amendment imply that you would have to change them each year, but it does sort of say you could reassess the approach, which means if you develop a better approach, you could do that. It doesn't say these ACLs only exist for a year or these OFLs only exist for a year. It says you essentially reserve the right to reassess this each year, and there is a comprehensive amendment for OFLs and such that is a year behind Amendment 17, which will be an opportunity to reassess this ABC control rule.

Mr. Waugh: Yes, but let's remember what we're addressing in that Comprehensive ACL Amendment is every other species we manage. What we're doing in Amendment 17 are the

species that are undergoing overfishing, those ten species. All the other species have to be done in the Comprehensive ACL Amendment.

Dr. Cooper: Is there anything that forbids you in the Comprehensive ACL to say this method that has been approved as our omnibus method is now applicable to those species in Amendment 17?

Mr. Waugh: Well, what we would have to do is do another amendment after the Comprehensive ACL Amendment to then change it for those ten species that we've already addressed.

Dr. Cooper: Why can't you include these ten species in the Comprehensive ACL?

Mr. Waugh: That's a good question; we hadn't thought about that. We thought we'd be finished with the overfishing ones, but if you all want to revisit them within the Comprehensive ACL Amendment, I can't think of any reason we wouldn't do that. The regulations from Amendment 17 would be in place for one year and then subsequently replaced for the regulations from the Comprehensive ACL Amendment, so there is no reason that if you want to refine your recommendations for these ten species, that you do that in the Comprehensive ACL Amendment as well.

Dr. Jiao: Just a quick comment about using overfishing limit that means FMSY in the United States, by using this limit we automatically accept a risk of about 50 percent, so that's something that we need to realize. This means even if we harvest perfectly at FMSY we are taking a 50 percent risk of overfishing. This is important.

Dr. Cooper: Thank you. Yes, I forgot about that.

Ms. Burgess: How many of these species are actually managed under a quota so that we do have some control to shut it down once the FOY limit gets reached?

Mr. Carmichael: That's all part of Amendment 17. That gets at the council dealing with its ACT and how it gets to them in its AMs. That's all up for debate later once we get past this point.

Mr. Waugh: But as of right now we've got all of them under quota management except red snapper of the overfishing species. John is right, as a part of Amendment 17 and then the Comprehensive ACL Amendment we will in essence have quotas for all our species.

Ms. Burgess: Are they required to report daily is this like using trip ticket records?

Mr. Carmichael: You must be from North Carolina because you're speaking of the finer details of quota management. I think all of those things await to be seen.

Ms. Burgess: I would not be in favor of using the trip tickets. There is a huge time lag.

Mr. Carmichael: More so than other programs?

Ms. Burgess: I wouldn't say that but about three months behind, anyway.

Mr. Waugh: Just for your knowledge, we will be receiving a presentation from ACCSP and they will be pointing out how they do quota monitoring up in the northeast. This is something the council will be specifying in Amendment 17 and the Comprehensive ACL Amendment because we're challenged with the system we have now to track the species that we have in place. As we add more, that system isn't going to work. That will all be specified in 17 and the Comprehensive ACL Amendment.

Mr. Carmichael: It may somewhat depend on whether two of our major states – you know, the timeliness might be impacted by whether two of our major states with trip tickets that predated ACCSP adopt something like the ACCSP SAFIS, essentially real-reporting things. But, you know, that's getting into what the states decide to do and how we do with that, and I think that's all the exciting arguments we're going to have down the road as we start dealing with real quota management in the South Atlantic.

Ms. Belcher: Okay, what is the pleasure with the current motion?

Ms. Burgess: Some of these species, the OY is awfully close to the MSY. For some of those species, do we want to back it off even further given that they're already overfished or overfishing is occurring, not necessarily overfished?

Mr. Gregory: Let's not confuse equilibrium yields with differences in fishing mortality rates and differences in biomass. Of course, that's when the thing has been sold, this OY, is that equilibrium yield is not that far below equilibrium MSY, but to get to that equilibrium you've got to reduce fishing mortality by 25 percent below fishing at MSY, which means reducing fishing effort in the short term, which means reducing catches in the short term by 25 percent.

I would say look at the biomass level of the population as a judgment as to how good an ABC is rather than equilibrium yields. Equilibrium yields to me is very deceiving as to what is close of what is far away.

Dr. Cooper: According to Jack, these yield at FOY numbers in this table are based on the projection model and not equilibrium yield. Am I interpreting that correctly, Jack, this table is F of OY times the current abundance?

Dr. McGovern: That's true for all the species except for snowy grouper. With snowy grouper, all we have from the projections is the yield at FMSY, but the TAC of 102,960 is held steady as the stock rebuilds, and so sometime in the future that will probably be close to the yield at FOY. All the rest of these are from projections produced by the science center except for mutton snapper and golden tilefish, which are close to BMSY so they're equilibrium.

Mr. Gregory: Does that mean that these numbers of MSY and OY is basically current stock abundance times the F of MSY and F of OY?

Dr. Cooper: The yield is projections; the upper ones are equilibrium.

Ms. Belcher: Any other discussion or comments? Andy, it has to read yet again.

Dr. Cooper: Well, before I read it, Jeff just pointed out something. To make go ahead to make this very explicit, that instead of “yield at MFMT”, “yield at MFMT applied to current biomass” to avoid this whole confusion that we’re talking equilibrium yield or projected biomass, so “yield at MFMT applied to projected biomass” and “yield at 75 percent FMSY applied to projected biomass”. Okay, so we’re very explicit that we’re not talking equilibrium yields. I think my seconder has to agree.

Dr. Reichert: I agree.

Dr. Cooper: Okay, and now I’ll go ahead and read the whole thing: Move to recommend that yield at MFMT applied to projected biomass equal the OFL and yield at 75 percent FMSY, the current SAMFC default definition for FOY, applied to projected biomass equal ABC as a reasonable interim step to address the species in Amendment 17 and assessed through SEDAR. For gag grouper, for which a probabilistic examination of overfishing is available, establish an ABC consistent with the level adopted in December 2007. Given the ACLs must be established annually, this interim approach will be assessed each year.

Ms. Belcher: All right, any further comment or discussion on the motion? Seeing none, we’ll go ahead and put it to a vote. All those in favor of the motion as it currently stands, please raise your hand; all those opposed. The motion passes as written. I’m going to go ahead and request a ten-minute break at this point.

Ms. Belcher: Okay, now we get to get into the exciting world of data-poor species relative to the same Amendment 17. How are we proposing to come up with estimates for OFL and ABC relative to data-poor species? Alex.

Mr. Chester: Carolyn, before we do that I wonder if we should entertain – and I’ll do this by way of a motion that the SSC recommends to the council that the council requests the assessing organization for each of these SEDAR species, that they perform a probabilistic analysis to give us an estimate of the probability of various catch levels, so that we can make some progress past the interim motion that we just passed.

Ms. Belcher: We currently have a motion on the table; do I have a second from the group?

Ms. Lange: I’ll second that.

Ms. Belcher: Okay, general discussion or comments about this? Christine.

Ms. Burgess: I’d actually like to see a presentation of this method applied to something like gag or something like that. Maybe you’ve already presented it to the SSC in the past, but I think a lot

of us new and haven't seen it and we would like to have an opportunity to discuss its pros and cons and how it's going to work.

Dr. Williams: It's coming out in the July Issue of Fishery Bulletin.

Ms. Burgess: What about the method by McCall, as well, for data-poor stocks; is that published anywhere?

Dr. Cooper: The method by McCall has not been published. He came up with that one night while we were working on the LENFEST Report. He said, "Hey, wait," and if you look at the approach there is actually a lot of subjectivity based on – I think a presentation on approaches for data-poor species would be good. I wouldn't think a lot of McCall just because it's still kind of on-the-cocktail-napkin-type level.

Ms. Burgess: I guess what I'm saying is I'd just like to see what all of our options are for setting some sort of protocol and discuss that at an upcoming meeting.

Ms. Belcher: Any other comments or discussion relative to the motion that's currently up on the board?

Dr. Cooper: Well, one thing I like about it is it just says "a probabilistic analysis", which leaves it open to interpretation as to exactly what it will do and how it will do it, but looking at probabilities and not necessarily saying, "Okay, Kyle Shertzer, you have a new job; start running".

Dr. Barbieri: Well, just a question. Erik, is this a realistic expectation because you work for the Center?

Dr. Williams: Yes, and in that respect I still just work for the Center so I can't really speak for our workload issues too much. Yes, we need it done.

Ms. Belcher: Any further comments or discussion on this? Okay, seeing none, I am going to go ahead and put it to the group for a vote. All those in favor of the motion as currently written, raise your hand; all those opposed, raise your hand. The motion carries. Now back to the issue of data-poor species. Andy.

Dr. Cooper: Could we clarify which – I was told in this table that there are some things in here that aren't the data-poor species that we're talking about. Can we clarify specifically which ones?

Mr. DeVictor: The data-poor species are on Page 18 in the back of the document on Amendment 17 Snapper Grouper Species Guide; red grouper, black grouper, speckled hind and warsaw grouper.

Dr. Cooper: Okay, so am I correct, then, based on Table 16, for all those species we have F-current relative to MFMT – Page 16 in the roadmap that was passed out yesterday, I think?

Dr. McGovern: I wasn't paying attention.

Dr. Cooper: For red grouper, black grouper, speckled hind and warsaw grouper, this table you provided us had F-current relative to MFMT; is that correct?

Dr. McGovern: That is correct and that's old information. It's from Potts and Brennan's Trends Report for red grouper, black grouper and speckled hind, and then for warsaw grouper, that's from Huntsman et al in 1992. That's the only data that are available so they're pretty dated.

Ms. Belcher: Any thoughts?

Mr. Gregory: Since these estimates are old and we don't know what method was used to get to them, why don't we talk in general about species that have not been assessed? Do we go the next step according to the proposed guidelines and talk about species that probably shouldn't be included in the – I forgot the terminology they used, but the management unit?

You know, for the first time the guidelines speak about species that you never intend to assess, that are a minor part of the bycatch, and you really don't want to spend a lot of time with them as opposed to the major species. You certainly don't want some default control rule shutting down the entire stock because coney, quote, is technically overfished when it's a minor bycatch species; and not worry about the estimates here and just lump these species in with all the others that we don't have stock assessments for.

Dr. Williams: The species Doug is referring to, I think the terminology is "ecosystem component stocks", and they are stocks – I'm sure the definition is in there somewhere, but if I recall looking at some draft somewhere, it meant to be stocks that aren't really targeted, that they are just bycatch, more or less. The problem we have here is we have stocks that are clearly targeted, red grouper, but we don't have an assessment for it. Just because we don't have an assessment, it doesn't mean it equates to an ecological component stock.

Mr. Gregory: Right, I didn't mean to imply that. I meant let's take the rest of the species and put them in two groups. One would be the ecological or ecosystem component and the other would be those that just haven't been assessed but need to have an OY.

Dr. Cooper: I'm correct, though, that these haven't been assessed but we've still determined that they are overfished; is that why they're on this list?

Mr. Waugh: I think we need to clarify what we mean by "assess". They've been assessed. They were assessed using yield-per-recruit analysis. We did management and did assessments before SEDAR showed up, so these are based on yield-per-recruit SPR values and they have been determined to be overfished.

We put in measures to end that overfishing, but the determination is that designation of overfishing can't be changed until we have another assessment. The species we're talking about are red grouper, black, speckled hind and warsaw. Those are the next groupings that you all need to deal with. These values came out of those yield-per-recruit analyses.

Dr. Cooper: So do we have rebuilding trajectories for these species?

Mr. Waugh: No, a number of these that are overfished were put into a rebuilding program over a period of time, and I believe that period has ended. We don't know what the current status of these species are. I think something that should be pointed out, too, red grouper, we have the data that we could do a SEDAR-type assessment on red grouper. It's just not in the planning horizon thus far.

Dr. Cooper: And how are we currently determining management measures for these species?

Mr. Waugh: Based on that yield-per-recruit analysis that was done. For speckled hind and warsaw, I think we've got a one fish per trip or one per vessel regulation. Black grouper we've got mirroring gag based on similar life history characteristics. Red grouper, I think the only thing we would have there would be the size limit and aggregate grouper bag limit; again based on the yield-per-recruit analysis.

Dr. Cooper: Well, I'll throw not a motion but just a concept that I'll be talking about in an hour and a half. I'm going to have to leave to kind of prep for a bit. Basically, with this catch, some portion of the catch is sustainable; and for those, if the stock is decreasing, some portion of the current catch is not sustainable. The question is what is that percentage? My guess is if we look at these trends and the stock is increasing, then probably the current catch level is sustainable.

If the trend is decreasing, some portion of that catch is not sustainable and then we have to decide what is a precautionary reduction in current catch? That's a framework that I haven't put in writing or maybe I am. Anyway, we need something to go forward.

Mr. Gregory: What trend are you talking about, a catch trend?

Dr. Cooper: I haven't actually figured out what these graphs out yet. Unfortunately, ALS – what is ALS?

Mr. Carmichael: Accumulated Landing System.

Dr. Cooper: So, yes, it looks like all we have is landings, then.

Mr. Gregory: Well, my point on that is what I showed earlier on black grouper. The regulations that were put in place has reduced consistently catches, so we can't go by catch trends to say if the stock is increasing or decreasing.

Dr. Cooper: I misspoke. When I saw all these graphs, I didn't realize that all of these are just different components of catch and that we don't actually have trends data. We know what the catch is; we have no clue what the stock is.

Dr. Barbieri: Which brings me to my question; don't we have at least some coarse measure of, you know, a fishery-independent survey through MARMAP that we could have an idea, some independent index?

Ms. Burgess: Is this information on like the logbook; it uses the term "index"? That's not a CPUE; that's just actual logbook landings?

Dr. Cooper: Page 12 of the handout actually has the word "CPUE" in it, so it looks like we do have some sort of thing that we might be able to call an index that we may or may not believe. That's deep water species; I'll stop talking.

Dr. McGovern: Andi Stephens did a CPUE for these species, including red grouper that's not in here, but it's in a previous version. It shows increasing trends for red grouper but for a logbook index. She also has CPUE for headboat landings for red grouper, too, that shows number and index for headboat. In the very back she has it for all the shallow water groupers and all the deep water snapper grouper, too, combined.

Dr. Williams: I don't think we can use this data very well because CPUE from fishery-dependent sources have to go through some pretty extensive analysis, and you have to try to eliminate targeting issues and various other things. I wouldn't want to go with this data without seeing the background analysis behind this in a little more detail. For instance, Page 4 and 5, the index from the headboat, it's the same graph unless I'm seeing things different, so something is messed up there for starters, red grouper and black grouper.

Dr. Stephens: Sorry, that's been through a couple of different revisions, Erik.

Dr. Williams: Yes, so I don't think this document is in good enough shape at this point for us to use it for that kind of decision-making.

Dr. Stephens: Erik, Page 4 and 5, that's an editing error for which I apologize. However, the table figures might be helpful. The CPUE analysis was extremely raw, and I say that here. It was thought that it was better than giving you absolutely nothing at all.

Ms. Burgess: From the electronic version that I have, it's different; it's not the same.

Dr. McGovern: The version that's handed out is a little bit different. Andi and I were looking landings with Monroe County divided, and the water body codes for logbook and ALS allow you to divide that pretty well after 1997 but not prior to that. That's the updated version just shows the landings from '97 on. We also have a table that has data for the species for ALS and logbook going back that has Monroe County complete and not divided, as well. That's the reason why the discrepancies there.

Dr. Reichert: To answer a question, I think MARMAP only catches red grouper and scamp potentially in high enough numbers to provide an index. All the other species we don't catch enough.

Mr. Carmichael: Have we resolved the versions of the document and determined that the one that is in the briefing book is the corrected and most up to date? I'm a little confused about the various documents people seem to have. I'd just like to know we're talking about A-25, stock trends, and if the one in the briefing book is right or not.

Dr. Stephens: I think Jack has updated it since the last time there was a logbook version, and that's the present version that we have that he handed out. Is that right, Jack? He nods.

Mr. Gregory: I would ask that anytime landings data is summarized like this, that the timeframe for different regulations be included to avoid any possible misunderstanding that the landings trends actually depict population trends. As I said, in that widely distributed publication, it does just that, it looks at landings trends taken from apparently NMFS Query System and concludes from landings trends what populations are overfished or not overfished.

Ms. Belcher: So how do we want to proceed?

Dr. Jiao: I want to ask a question of the committee of logbook CPUE and the headboat CPUE. Andi just said the CPUE doesn't make sense at all. I just wonder should we just ignore those figures or do you think those figures still tell us something?

Dr. Stephens: I think that we decided to provide them to demonstrate how little information we do have and that the trends information by itself is in disagreement in many cases with CPUE information that you get from the same data base.

Dr. Jiao: I agree with that. I think it still tells us something even though the data point is pretty poor. I do have some concerns like in the Page 12; for both the deep water species and the shallow water species, to me, the logbook CPUE always have a contrary trend that is showed from the headboat CPUE. I just wonder whether there is some reason there; there must be some reason there – the figures shown on Page 12.

Dr. Stephens: Right, the data sets were treated consistently; that is, I did the same analysis on each data set and that really is – the conflicting trends really are how each data set reflects these species. In other words, the information really isn't there, but we looked in case there was information.

Dr. Cooper: Do we have current overfishing definitions for any of these species?

Mr. DeVactor: We set the current overfishing definitions through a Comprehensive SFA Amendment, so MFMT I believe is FMSY, yield at FMSY as the definition.

Mr. Waugh: Are we talking about for some of these unassessed species; what the overfishing definition is? We can go back and check, but I think some of them may be still tied to 30 percent or 40 percent SPR. We can double check that.

Mr. Carmichael: You have MFMT and FMSY in the table for black grouper, speckled hind and warsaw, which I guess would reflect the SPR-based evaluations that were put in so many moons ago.

Dr. Williams: That's not possible. How can you get an MSY estimate from a per-recruit analysis?

Mr. Carmichael: FMSY.

Dr. Williams: Yes, how? It's a proxy so it's not FMSY.

Mr. Carmichael: You have MFMT. It says it's FMSY; it says it comes from Potts and Brennan. That's all that I know about it and perhaps your agency will comment on how they came up with it. I think the council implemented what the National Marine Fisheries Service them many, many years ago, seven or eight years ago now. Yes, whether or not those are possible, I guess is something up for debate, but that is what we do have and that's what the council has implemented and the National Marine Fisheries Service has approved for MFMT, so I think we can't really say anymore than that.

Dr. Cooper: Well, does any one room have a gut instinct as to even suggest any of these species up, down, level, gut-check?

Dr. Williams: I do know at one point speckled hind was petitioned for threatened listing, if that's any indication.

Mr. Gregory: Just recently I learned that red grouper, at least in the Gulf of Mexico, was determined to have at size of maturity between 12 and 16 inches, 50 percent maturity for females, which was quite different than the older study done by Martin Mullin in the sixties of 20 inches, 18 and 19 inches. From that perspective, that's what made the red grouper stock in the Gulf appear to be much more healthy than was thought in the past.

If the red grouper in the Atlantic, and I would have no reason to suspect otherwise, mature at about the same, the 20-inch size limit is providing pretty good protection for red grouper reproduction, so that would make me less concerned about that species.

Dr. Williams: Actually not to that point, but I was going to interject that those Fs for black grouper, red grouper and speckled hind are proxies for F 30 percent.

Dr. Buckel: Erik and I were involved in a study that looked at – we fished areas that were fished back in the seventies. We went back to the same locations that Chuck Manooch and others fished in the early seventies. There were three locations in Onslow Bay, North Carolina, and the

red grouper catch-per-unit effort in '05 and '06 were significantly higher at most of those sites compared to the seventies.

The catch-per-unit effort trends that you see for red grouper from both the headboat and the commercial logbook data suggests that and we found that. And in that fishery-independent study, there were no data on black grouper, and speckled hind and warsaw were both caught in the 1970's in at least one of those sites and we didn't catch them at all in '05 and '06.

Ms. Belcher: So where does lead us to?

Mr. Waugh: Again, this suggestion that you all had before to revisit these ten species in the Comprehensive ACL Amendment, think about that here, because you can take some interim step here with these four and then spend some more time on how you might refine that in the Comprehensive ACL Amendment.

Mr. Gregory: Well, I make a motion that we set ABC to be equal to the average landings over the last five years for each of the species as an interim step until we get the stock assessments with the probability distributions of our uncertainty.

Ms. Belcher: Is there a second to that?

Dr. Reichert: I would like to say that especially speckled hind or allegedly one of our master students has completed the study. I would say that's probably not a good idea for speckled hind.

Ms. Burgess: Do we have to set the OFL first before we set ABCs? I think that would be prudent.

Mr. Carmichael: Well, you could get a second on the motion and then decide or maybe the motion fails for lack of a second.

Mr. Gregory: Move to set ABC and OFL –

Ms. Burgess: But the ABC has to be less than the OFL. It has to be less. I don't think for the ABC –

Mr. Waugh: I mean, you've got a precedent with your other. I don't know whether you see it like that, but if you made the average landings your OFL and then made your ABC 75 percent of that, that's something to start with.

Ms. Burgess: On Page 28, the third sentence from the bottom does have the OFL has to be greater than the ABC, which can be greater than or equal to the ACL.

Mr. Carmichael: Point of order here; you have a motion that is awaiting a second. Before you begin destroying this motion, let's decide if it's even going to get a second. It can fail for lack of

a second, in which case someone else could put a competing motion on the table, which is probably the best way to proceed at this point.

Mr. Gregory: I just want to change it to say, then, given that information that was just provided; move to set OFL equal to the average landings over the last five years for those species; and ABC equal to 90 percent of the OFL. That's my motion.

Ms. Belcher: Do we have a second?

Dr. Larkin: I'll second it.

Ms. Belcher: Okay, Sherry has seconded. Christine.

Ms. Burgess: Will, what indication do we have that the landings over the last five years are sustainable?

Dr. Crosson: Well, we don't have evidence that it's overfished. We're trying to set that at that level. I don't see the need. Again, we don't have any evidence of overfishing. I don't see the rationale behind doing a 10 percent cut for something that we don't have any biological reason for doing so. I'm a little bit lost on that.

Mr. Gregory: Well, I did the 10 percent difference because the guidelines say ABC has to be less than OFL. We can make it 95 percent, 99 percent. Well, then I challenge that you ought to come up with a more scientific, less arbitrary definition.

Mr. Chester: The guidelines and the LENFEST Report say that in cases where uncertainty is great precaution should be great as well and the buffer between OFL and ABC ought to be perceptible.

Mr. Waugh: So what does mean, Alex?

Mr. Gregory: It can't be one pound.

Mr. Chester: Well, to begin with, it means that they cannot be equal; and that to the extent that we know little about these species, we ought to have a larger buffer.

Dr. Williams: I don't think we should lump these four together by any means. There are indications that there are very different dynamics going on for these. Red grouper, some indications are that maybe it's near some sustainability level; I don't know. But speckled hind and warsaw are in absolute horrid shape, and I would even go as far as probably when we get through this motion, to motion that we set the ABC to zero for both of those. I have no feeling for black grouper.

Ms. Burgess: Is this proposing lumping all those together? Oh, the same criteria, okay, but I thought you meant lumping them together.

Mr. Gregory: Well, then, Erik, offer a substitute motion to that effect. You can offer a substitute motion. That's protocol. We don't have to vote this one up or down.

Dr. Crosson: I guess I have a question for Erik. You said that speckled hind and warsaw grouper are really in bad shape. What is the history for the studies on that? I don't know anything about this.

Dr. Williams: Jeff cited one example that there is some historical records from our lab where they caught back in the seventies and visited those same spots. None of them were caught; no speckled hind, no warsaw. From the limited data that we do have, there are some trends in at least the headboat index that suggests – in the headboat fishery that suggests speckled hind has dropped tremendously. That's why it was petitioned to be threatened listed.

Warsaw, by all means, has been extirpated from many locations off the Carolinas and Georgia. Nobody has landings of warsaw in many years. All the indicators are there in my mind that those two species in particular are in very bad shape. Their life history also suggests that they're very vulnerable to rapid overexploitation.

Dr. Reichert: As I mentioned earlier, one of our graduate students just completed a study on speckled hind in the last couple of years – and I tried to look his thesis up but I don't have it on my computer – very few reproducing speckled hind, and it seemed like most of them were caught before they reached sexual maturity, and there were some other life history indications that they were in really bad shape. I agree with Erik to, if nothing else, at least take speckled hind and potentially warsaw grouper out of this generalization.

Dr. Barbieri: This is the kind of guidance I guess that some of us are asking for. I mean, if you have an idea of the status of these species that could give us some indication of what direction they are and that will give us some guidance on how to proceed, I think, in my opinion, that justifies separating them into two different groups and actually treating them differently in terms of uncertainty and precautionary approach.

Dr. Crosson: Actually I wouldn't mind splitting into four different votes or four different standards. I mean, just from Erik and Marcel, I'm hearing that speckled hind and warsaw grouper should be treated differently in terms of their status, and red grouper and black grouper are also different. In my mind I don't think we should lump all of these together or even into two pairs and into four separate categories. Well, is there a motion on the ground right now that we split it into two? I'm not sure if Luiz had already proposed to split it into two or not.

Ms. Belcher: Any further discussion relative to the motion on the table? Okay, call for the vote then. All those in support of the motion as it's currently worded; all those opposed. The motion fails to carry. Okay, with that said, it's going to fire back to those who are going to split it out into the proper context.

Dr. Cooper: I have to bolt so I just wanted to raise an issue before I leave. I'm not entirely sure – Scott made the assumption that in the absence of evidence of overfishing, we should assume that they're not overfished. That kind of flies in the face of the precautionary approach. What we do about that, you know, if we don't know if overfishing is occurring, what do we assume; I'm not sure. I just wanted to kind of have it on the record that the precautionary approach wouldn't be to assume everything is okay. I'll just put that out there.

Dr. Crosson: In answering that, I just would like to hear at least some – it doesn't have to be a SEDAR assessment – I'd just like to hear some information about a species before I decide to do any kind of cuts from current levels.

Ms. Belcher: We need some sort of motion relative to – Erik, sorry.

Dr. Williams: I move that we set the ABC level for speckled hind to zero.

Ms. Belcher: Do we need an OFL to go with that? Marcel.

Dr. Reichert: Do we need to make separate motions or can we just fold everything under one motion?

Mr. Carmichael: I think our previous experience shows we probably better approach these species one at a time to avoid catastrophic failures by individuals.

Mr. Chester: I second that.

Ms. Belcher: Further discussion? Doug.

Mr. Gregory: I don't know if this right or wrong. They're talking about data they know about. We've had no data presented to us. It doesn't seem like the right process. I feel like we're being rushed into making decisions that are not deliberative enough. That's my concern with going forward like this based on comments by people without having documents in front of us or having a chance to read it.

Mr. Carmichael: Well, to dispense with the process, you were asked in June, you were asked in December, specifically in December what data would this committee like to be presented with in June to recommend ACLs and OFLs and ABCs and to make essentially fishing level recommendations.

The committee gave us no guidance, so staff provided the landings data that are available, the CPUE trends that are available, any references that we could dig up from historical lab reports and everything else. You have everything that we have right before you. There may be other data that the science center has dealt with, but I think they're largely looking at what they see in this information here in those historical reports. I don't know if there is other information.

You have had those CPUE. That's what Erik was talking about. I think you have basically what they have. They may looked at some length comps or age comps that you're not privy to, but I think at this point if they're telling us the age comp is looking as bad as the CPUE does, then maybe we better go with their expert judgment because that's all we have, or else you convene another meeting and we get them to provide us some data and we try to settle this at another date.

Dr. Williams: I'll just add one thing. I think this is just a portion of the data. It's a large portion and it's some of the more important parts of it, but that being said I think, with the except of warsaw grouper, these other three have the potential to be assessed. It may not be a full age-structured assessment model, but if they were run through a SEDAR we could potentially come up with benchmarks for these.

Dr. Crosson: I guess this is in the information that we have front of us. I realize this is difficult but to set the ABC to zero right now, I don't feel like I can do that with just this information, without a proper assessment.

Dr. Barbieri: Well, I think Erik addressed what I was going to bring up. We can consider this as another interim decision and make a recommendation for this species to be assessed whatever way possible. Obviously, we're not going to be able to do a statistical catch-at-age analysis, but whatever way we have to have it assessed within some timeline that we're going to have to I guess set here as acceptable to the Center.

Ms. Belcher: Any further discussion relative – Gregg.

Mr. Waugh: Just one question for Erik about the overfishing level; how do we deal with that? That's supposed to be a recommendation, too, and, certainly, with setting ABC equal to zero renders your overfishing level moot, but I guess the overfishing level would be unknown at this time. If that's the case, then maybe it would good to add that to your motion.

Dr. Williams: Sure, I'll amend my motion to – yes, John is doing it. I move to set ABC for speckled hind to zero and to recommend that the OFL is unknown.

Ms. Belcher: Alex, is that still good with you?

Mr. Chester: Yes, that's fine.

Ms. Belcher: Any further discussion relative to this item? Seeing none, we'll go ahead and put it to the vote. All those in favor of the motion as written; all those opposed. The motion carried. I have to wait to for someone to put the next motion forward. Erik.

Dr. Williams: I move to set the ABC for warsaw grouper to zero and to recommend that the OFL is unknown.

Ms. Belcher: Do I have a second?

Dr. Reichert: I second that.

Ms. Belcher: Seconded by Marcel. Further discussion? We'll put it to a vote. Doug.

Mr. Gregory: With ABC equal to zero, what impact does that have on the snapper grouper fishery where you have a bycatch of these species?

Mr. Waugh: I would recommend that the SSC confine its discussion to setting the overfishing level and ABC and it's up to the council, then, to set the ACL and deal with that.

Ms. Belcher: Further discussion relative to the motion?

Ms. Burgess: Are either of these species on the plate for SEDAR?

Dr. Williams: I'm trying to remember. Speckled hind was on the SEDAR schedule at one point and I don't – I haven't seen the latest. It is on 2012; I hear in the back of the room.

Mr. Carmichael: Warsaw grouper and speckled hind are on the SEDAR schedule for 2012. Of course, I will remind the committee that you are asked for input on the SEDAR schedule so once we dispense with this you could perhaps suggest a motion relative to what you think the SEDAR priorities should be for the immediate future.

Ms. Belcher: Further discussion? Okay, if not, we will put it to a vote. All those in favor of the motion as currently written, raise your hand; all those opposed. The motion carries. Okay, carrying on with this, we have another motion relative to – Erik is done. We still have two more species that we need to discuss; red grouper and black grouper. What is the group's pleasure on what we want to put forward as a potential motion for how to handle these species?

Dr. Williams: I don't want to go as far as just set the motion. I think I said it earlier; there are indications that red grouper seem to be in sort of okay shape, possibly sustainable; so using some average landings might not be that offensive. I don't want to go that far because my stance on this is there is enough information there definitely for red grouper to have a full-blown assessment and it just doesn't do us good to do an interim measure like this when it's there. We just need to get it done.

Ms. Belcher: Are they on the schedule, John?

Mr. Carmichael: It's sometime after – it got bumped out, but I'm not sure what the timing of red grouper was. If you'll holler, I'll state it for the record, Julie. The South Atlantic Red Grouper has not been rescheduled, I guess, since vermilion and king mackerel and Spanish mackerel booted it out. Red grouper has not reappeared on the schedule and is not on the list to be assessed at any time in the foreseeable future.

Ms. Belcher: So what does the group see us putting forward as a motion relative to red grouper?

Dr. Crosson: I guess I'll make a proposal. This is for red grouper only – equal to average landings over those last five years, an ABC of 95 percent of OFL.

Ms. Belcher: Do I have a second from the group?

Mr. Gregory: I'll second.

Ms. Belcher: Further discussion relative to this motion?

Dr. Crosson: I just used fairly consistent landings over the past decade or so, looking on Table 13, and I haven't heard anything other than just some offhand comments that there are any problems with red grouper right now. I don't see any reason for doing any cutbacks in the current catch.

Mr. Waugh: The table in this document, Amendment 17, Snapper Grouper Species Guide, doesn't have the 2006-2007 headboat values, so the intent would be that we get those from the headboat program and plug those in and whatever average landings are for the period 2003 through 2007, that would be the values that we use, just to get that clarification.

Ms. Belcher: Any other discussion relative to this motion? Scott.

Dr. Crosson: Let me just add that I would believe, considering again the fuel prices that have been rocketing up over the past few months, that we are going to see a drastic reduction in effort for all these different sectors over this coming few – I guess indefinite period until fuel prices drop, which I don't see happening anytime soon. I don't see the risk right now with these latter two species.

Ms. Burgess: Some of the more recent years have been the highest landings.

Ms. Belcher: Any other discussion relative to this motion? Okay, seeing none, I'm going to go ahead and put it to the group for a vote. All those in favor of the motion as it currently stands, raise your hand; all those opposed. Okay, the motion carries. Okay, relative to black grouper, what is the pleasure of the group relative to assessing these levels?

Dr. Crosson: I'll make the same motion I did before; just copy it over; 95 percent of the OFL. **Move to set the OFL for black grouper equal to the landings over the last five years, 2003 through 2007, an ABC of 95 percent of the OFL.**

Ms. Belcher: Do I have a second?

Mr. Gregory: Yes, I second it.

Ms. Belcher: Okay, any further discussion or comment? Anne.

Ms. Lange: I have a question of Erik or whoever else; you had indicated that red grouper appears to be in pretty good shape. What is your feeling on black grouper; any indication at all?

Dr. Williams: No, not really, but there has been discussion already they've linked black grouper with gag grouper in a sense, and we could use gag as a proxy possibly for that. I don't know because I just don't have a feel for that fish at. I don't know the data very well.

Dr. Barbieri: Well, Doug, don't you have at least a general idea, you're being down in the Keys and dealing with the industry down there, about the health at least in general terms?

Dr. Crosson: I will add that the confusion with gag and black is going to be a management question that the council is going to have to deal with, especially with some of the reductions that they're talking about. That's a policy question; that's not an ABC question that we have to deal with. I don't know how that's going to get pulled out in terms of the regulation, but in terms of the ABC it's a separate issue.

Ms. Lange: I guess my question would be if we had – and, again, it's all sort of ancillary, but there seems to be less certainty in the status of black grouper relative to the assumed status of red grouper, so I would think that it might be worth putting it at a somewhat lower level than the 95 that we used for red just to acknowledge the lower degree of certainty. I'm not sure exactly what that might be.

Mr. Gregory: I don't remember where his red grouper data came from, but he lives in North Carolina. Black grouper don't occur in North Carolina so he may not know as much about black grouper as red. Just because he's quiet about it, it doesn't mean we're less certain about it.

Dr. Barbieri: Actually, I had a question for Julie. I've been hearing about black grouper being on the SEDAR schedule and I haven't see the latest version of the SEDAR schedule.

Dr. Neer: No, black grouper is not on the schedule at all. Of the four species that we've been talking about, speckled hind and warsaw grouper are scheduled for 2012. Red grouper and black grouper are not on the schedule at all currently. Black sea bass that we talked about earlier was on the schedule for 2011, but no black grouper.

Mr. Gregory: Hey, SEDAR people, there's a heck of a lot more catches of reds and blacks than there are warsaws and speckled hind. Let's get some priorities straight.

Mr. Carmichael: We'll take any guidance you have. That's where we take it from, the councils and SSC feedback.

Mr. Gregory: That's my guidance is 2012 is a long way off even for those species. I certainly wouldn't want to put reds and blacks off to 2012 and bump them. I don't know what the whole schedule is, but these are potentially important components. I would say given the proposal the council has before it for managing reds and blacks as a part of the gag quota and the gag four-month closure, that the situation we're going to run into here is that the catches of these two

species, reds and blacks, are going to be less than the average of the five years and is going to be less than 95 percent, so it's going to be less than the ABC.

I guess that means, according to this control rule, they will remain relatively healthy, and I think the gag managements are going to dictate red and black management, so there is no reason I think for concern about them. You're saying 5 percent may be too close given that we don't know as much about blacks, but I think blacks and reds are going to be managed through the gag thing, so their catches will probably go down.

Mr. Carmichael: Maybe you'll dispense with the motion you have on the table and then you'll your mandate to give us guidance on what you think should assessed through SEDAR. I'll be glad to put the SEDAR schedule up on the screen for us all to look at. Incidentally, it's in the briefing book, Attachment 2 under SEDAR Committee.

Ms. Belcher: Okay, the motion on the table is to set OFL for black grouper equal to average landings over the last five years, '03-'07, and ABC equal to 95 percent of OFL. It's been seconded. Putting it forward again, further discussion or questions? Jeff.

Dr. Buckel: I have a question for Erik. For the red grouper I don't think you voted for that, and I just was curious why. You mentioned you felt that might be – the way things are it's probably sustainable, I'm just curious why you did not support the last motion.

Dr. Williams: Because I don't endorse ad hoc methods for establishing ABCs unless it's pretty clear we can go in one extreme. In the case of speckled hind and warsaw, setting it to zero was justifiable in my mind.

Dr. Reichert: I have a question. Since we are using the tables from the handout, and that may like an edit, but some tables have the same species and they are called either shallow or deep water. Is that an editorial issue or are they the same species; are the same numbers? Like in Table 11, the heading says it's deep water snapper groupers.

Mr. Carmichael: I believe you have four species and two units; is that correct, Rick? We have these four individual species but we also have the shallow water snapper unit or whichever it is and the deep water unit, so we have perhaps some more things to dispense with once we deal with these? Is that correct, Rick, we have these species and then we also have those two groups to deal with?

Mr. DeVictor: Yes, the council has requested that staff bring before the SSC that OFLs and ABCs at least be discussed for these groups and set if possible. I just think the table heading is wrong for that Table 11 that you refer to.

Dr. Reichert: So that's shallow water; that should be shallow water groupers. Okay.

Dr. Pollock: I'm not sure if this is just anything, but I kind of agree in this case with what Erik said. It seems to me like if we're a scientific committee this just seems so incredibly ad hoc, and

we are supposed to be a scientific committee; so if we don't know something, why we are setting these really ad hoc rules. It seems like if you're going to be ad hoc, you should be very conservative and this doesn't seem to me a conservative rule if you don't know very much. That's all I wanted to say about it.

Ms. Belcher: Further points of discussion? Scott.

Dr. Crosson: I do understand what you're saying, but we do know that high fuel prices are going to drop effort, at least probably with a lot of the headboats and the charterboats. We do know that the gag closures are probably going to affect the fishing patters for some of these species that are caught at the same time. I know when we set a number, the 95 percent of the ABC, we're not saying that many fish are going to be caught. We just feel that's the maximum level that they can be caught at, but I don't think we're going to come anywhere near that the next few years.

Dr. Pollock: It seems like if that's the case, then that should be reflected in the motion rather than – you know, you're voting on a motion, but someone is telling you, well, don't worry about it because it's not going to be that anyway. It doesn't make any sense to me logically to vote on something in that way.

Dr. Barbieri: Ken, we all agree that this is very unsatisfactory, and we're all really somewhat disappointed at our inability to address this issue properly, but the bottom line is until we have these stocks really fully assessed, whatever level of assessment we can actually get, until we have that assessment in front of us, we won't be able to make a really well-informed decision here. I mean, that's the reality.

I think to move this forward, my understanding is that we're making these motions really with the understanding that these are interim measures basically to allow the council to get on schedule with the MSA requirements and that we will revisit all of those overfishing levels, ABCs and ACLs and all the different benchmarks as we get assessments on the table. I just don't know how to be responsive to the council's request for guidance on setting these benchmarks with the level of imperfect information that we have and do any better than this.

Dr. Reichert: I absolutely agree, and as we did with one of the previous motions, should we add some language to that effect, because, again, we are the Scientific and Statistical Committee. Should we make some language in our motions that in spite of all the uncertainties, given our tasks, we make these decisions, but we need more data?

Dr. Barbieri: And I was wondering about the same thing. I mean, since we split these motions by species, perhaps we can do just a separate motion that would address the need for updated stock assessments, the best available stock assessments we can get for these species; and in that same motion we phrase our intent to revisit these benchmarks when we have that information.

Ms. Belcher: Further discussion to that point?

Mr. Carmichael: And when you write your report supporting these motions and how you came to this I think is really your opportunity to carefully, during the work session, whenever that should happen, get the caveats down that support them and get your concerns in there, especially your concerns about having to make a decision with incomplete information and all the caveats that are going to be associated with it. Just because they're not in the motion, it doesn't mean that you don't say them. You can write them in your report. The council will read your report. It will be the best record of how you came up with these decisions.

Dr. Jiao: I have a specific question about the landings of black grouper in the last almost 30 years. It seems to me that the landings are decreasing over time. I'm just wondering it's stabilizing in the most recent two years, but my question is what is the reason for the higher landings before the mid-1980s and what is the reason for decreased landings after mid-1990's? If we believe this figure, if we do a stock assessment, it's very possible we are going to come up with a decision that the fishery is overfished because now the landings are low, but historically it was high. I think we need to figure out the reason of the pattern that we observed of showing the figure.

Dr. Barbieri: There are all sorts of uncertainty that are lumped into this information. One of the things that we don't have here to play with is we don't actually know the biomass of the stock out there. We have no information about the actual rates of fishing. The index will show some trends over time that we can use as guidance. Until we have some anchor on the biomass of the stock as relative to some benchmark that we feel is acceptable and a rate of fishing also compared to some benchmark that we set, we really won't be able to get out of this impasse, I don't think.

Dr. Jiao: Again, maybe I should restate my question. To me, from the index data, it seems like the stock is healthy, fine, but from the landings it doesn't reflect the population status. I don't know, is it a policy-related reason that the landings are low in the recent ten years?

Mr. Gregory: I showed a graph this morning about black grouper on the east coast of Florida, and the comments were made that prior to about '88 or '89 there was a confusion of gag and black. Now, if we had data that showed what part of the South Atlantic Region these landings came from, if they were from North Florida and above, they would be almost a hundred percent gag or 95 percent gag. Prior to that period it was a mixture of species.

Now what I showed this morning was that in 1991 the South Atlantic Council implemented the first size limit on groupers of 20 inches – prior to that there were no size limits – a ban on fish traps and required fishing permits, and landings went down at that point in time. Then in 1994 Oculina Bank was closed, which is a grouper area in South Florida, so I would assume that would be black and gag mixed, if not mostly blacks. Landings went down after that.

Then in 1998 limited entry was implemented in the snapper grouper fishery, and landings went down after that. In 1999 a 24-inch size limit was put in place and longline gear was banned in the South Atlantic, and landings have been stable since then. It looks to me like regulations are driving the landings at this point.

Dr. Jiao: Okay, so if my understanding is correct, the figures become a policy reason. It's because of the management policy, but if this is the fact then I would support this motion, but I would be more comfortable to decrease the 95 percent to something like 90 or 85. That's my suggestion.

Ms. Belcher: Further discussion? Scott, do you want to make –

Dr. Crosson: I would like to drop it to 90 percent.

Ms. Belcher: Doug, do you still support that as the second?

Mr. Gregory: Okay.

Ms. Belcher: Any further discussion on this? The motion currently as written states move to set OFL for black grouper equal to average landings over the last five years, 2003 through 2007; and ABC to 90 percent of OFL. Any further discussion? Okay, seeing none, I'll go ahead and put it to the vote to the group. All those in favor of the motion as written, raise your hand; all those opposed. The motion carries. Anne.

Ms. Lange: I just want to say that I agree with what John had stated earlier that when we or whoever is writing the report in the working session, that we document the concerns we have with having to do this knowing that we really should be looking at the assessments and more information, but this was trying to address the requirements that we get this done in this timeline.

Dr. Buckel: Do we want to have a motion to get black grouper and red grouper put on the SEDAR list ASAP?

Ms. Belcher: That sounds good; do you want to put it forward?

Dr. Williams: Aren't we going to discuss – we're going to discuss the SEDAR schedule at a later time; aren't we? It's probably better to do any SEDAR-related motions then.

Mr. Carmichael: You don't have the SEDAR schedule on your agenda as a specific item.

Dr. Williams: We don't?

Mr. Carmichael: No, but you may choose to go ahead and give us some guidance that we will take to the steering committee when they meet sometime this fall.

Mr. Gregory: Could you put up the SEDAR schedule on the screen, John? It is Attachment A-2 from the SEDAR Committee. It looks like the first opportunity we have is SEDAR 20, which is menhaden and croaker review.

Dr. Williams: I have a little more insight on the SEDAR schedule and our capabilities. I'll put forth this might get me in trouble, but I'll move that we recommend that white grunt to taken off the SEDAR schedule and that we put red grouper in its place.

Mr. Gregory: Well, isn't that ongoing; hasn't that already started, the hogfish and white grunt? If they haven't I would substitute red and black grouper for hogfish and white grunt because we've already had a hogfish stock assessment. I don't understand the concern about white grunt, personally.

Dr. Neer: We're just in the planning stages for 19; you are approving the schedule in terms of reference.

Mr. Carmichael: The state of Florida is taking lead on the South Atlantic and Gulf Hogfish Assessment. I guess the question would be whether or not the science center believes they could accommodate black and red grouper.

Dr. Williams: Couldn't the state of Florida possibly take over the black grouper assessment?

Dr. Barbieri: The short answer is yes; the state of Florida would gladly work with the science center to produce those assessments, but I think that we still need to discuss the real need if we're talking about priorities in terms of hogfish. I completely agree with the white grunt. Hogfish, we all understand we have some needs there. This has been undefined for a while. Looking at this list of priorities, I feel compelled here – maybe I'm speaking out of turn, but perhaps we can propose some substitutions because I think that, as Erik pointed out, black and red grouper are bigger than hogfish.

Mr. Gregory: What are the needs for hogfish? It's a species that's harvested only by spearfishing. There is no real commercial fishery, and it's a relative shallow water fishery.

Dr. Barbieri: Maybe Mr. Carmichael here can help me out with this, but the issue here is that during SEDAR 6, I guess, we addressed hogfish. The assessment was not accepted by the review committee. Therefore, we don't have an assessment now on the table for hogfish, and this was just an opportunity, through this update, to then produce an assessment for hogfish. One of the reasons before the assessment was accepted, one of the reasons was that some incomplete information and some studies undergoing were going to fill that information gap. So this was just an opportunity, but I don't see any sense of urgency.

Mr. Gregory: As someone who shoots every hogfish he can see and that's legal, there are a lot of small hogfish in the Keys. I mean, there is no indication of any lack of fish for someone to get their bag limit or whatever. It seems like a minor species relative to reds and blacks. I wouldn't be too concerned with them.

Mr. Carmichael: I would think if Florida believes a higher priority exists for black grouper than hogfish in their area and this committee believes that a higher priority exists for red grouper than white grunt, then I would imagine the council would support making these changes, especially if

those who are actually the heads of the people who will have to actually do these assessments believe it's a feasible task, then it seems to me all the skids are greased and this should happen.

Ms. Belcher: So, Jeff, are you still supporting this as yours?

Dr. Buckel: Yes.

Ms. Belcher: It needs to be read into the record.

Dr. Barbieri: I'll second Jeff's motion.

Ms. Belcher: We still need read for the record.

Dr. Buckel: Move to add black grouper and red grouper to the SEDAR assessment schedule ASAP; recommend that white grunt be replaced by red grouper; and hogfish be replaced by black grouper in SEDAR 19.

Ms. Belcher: Okay, that was seconded by Luiz. Any further discussion relative to this motion?

Dr. Williams: I will add that what has been the holdup for switching white grunt out for red grouper is the thought that we weren't caught up on aging, but we are caught up on aging for red grouper, so it's definitely doable.

Ms. Belcher: Any further comment or discussion relative to this motion?

Dr. Neer: I just have a quick question. Now black grouper is only South Atlantic or we'd only be assessing the South Atlantic stock of black grouper that occurs in the Gulf; just for clarification because white grunt was only South Atlantic.

Mr. Carmichael: Hogfish was hogfish, and I'm believing black grouper will be black grouper as in the entire stock. Hogfish was the hogfish stock led by the state of Florida and by hogfish being replaced by black grouper our intention will be that the state of Florida will lead that and do a black grouper assessment.

Dr. Reichert: I'm just thinking about our schedule in terms of life history information, and I'll e-mail our people and see what we have available and what would we potentially need, because this means that we would have the data available by probably mid next year. Fecundity estimates may be somewhat of an issue because we haven't had time to collect too many of the data.

Mr. Carmichael: Julie, the data workshop is tentatively scheduled for?

Dr. Neer: May, May of next year; October for assessment; and then review in January of 2010. This council would not see it until June of 2010.

Dr. Barbieri: Julie, we might have to adjust that schedule a little bit just because of the aging data that we're going to have to dig out the stuff and work with the Center.

Mr. Carmichael: Do the principals they could – Marcel, do you think you could get could get some information on this before this committee adjourns and you could provide some guidance on the schedules since that is an action item for you, and get that through the SEDAR Committee and everything. If you say we need to push the data workshop back a couple of months, that's really easy to do right now.

Dr. Reichert: I can get that information. I'll e-mail Dave Wyanski tonight. I think the issue is more – particularly in fecundity estimates, I'm not sure how much they available. It's not a matter of how much of the already collected samples that we need to process, but do we have enough samples collected and can we collect enough samples before early next year to give a reasonable estimate. I'll get that information early tomorrow morning.

Dr. Neer: Just to comment on switching the schedule, we can't push things too far back because we're already into January 2010 for a review, and we have four things on the schedule for 2010 already, so this cannot run over to the middle of 2010 or else I'll lost my brain.

Mr. Gregory: I don't know who to address it to, Julie or Erik or John, but why is SEDAR doing menhaden and croaker?

Mr. Carmichael: SEDAR is putting on a review of menhaden and croaker. The assessments will be conducted by the Atlantic States Marine Fisheries Commission because that's part of the SEDAR process. The ASMFC is an equal partner in SEDAR and occasionally we provide reviews for them, so that's what we're doing there. It's not involving the SSC and it's just a review. It's not taking a slot. As you can see, there are two other full SEDAR slots in that year so it's not occupying a slot that you could stick another species in.

Dr. Williams: But it is taking up some Southeast Fishery Science Center staff time for menhaden in particular.

Ms. Belcher: Okay, again, back to the motion at hand; anymore discussion relative to the motion that's currently on the table? Seeing none, I'll ask for the group from the group as to accepting this motion as currently written. All those in favor, please raise your hand; all those opposed. The motion passes.

Okay, we still have the issues of the level for both the shallow water and the deep water group to address. Again, what is the pleasure of the group relative to motions for these? Can we please have some open discussion on how we think we should proceed with this grouping's issue.

Dr. Williams: I think, first, I'd want to know a little better description of how this grouping is going to be used for management. I mean, when we set an ACL, I'm not clear as to what the purpose of this is, how it's going to act in management.

Mr. Waugh: I'm not sure we're exactly clear either. I mean, one approach to species groupings could be similar to what we're doing with – we have a gag closure and so we prohibited associated species. The other argument is to create a species grouping to have an indicator species that you know something about and sort of sweep the other unknowns under the umbrella of that indicator species.

I guess those are the two approaches that we are looking at. Certainly, for the overfishing species you have given us individual recommendations, so it appears less likely that one would argue to create an indicator species for the deep water group, given that we've got several of them that have individual overfishing level recommendations and ABCs. However, there are still some deep water species that you will be addressing in the Comprehensive ACL Amendment. So those are the two ways that we know right now that these species groupings would be used.

Dr. Williams: We've shot these groupings down numerous, numerous, numerous times in the past, and, again, I see no reason to go forward with any kind of groupings, especially ones that don't have any scientific justification for their existence. I mean, first off, you look at the shallow water group, there are no snappers in there so why are we just grouping the groupers yet black sea bass is conspicuously absent? It just makes no sense and I don't think we should proceed any further with groups.

Dr. Crosson: I find myself in agreement with Erik, the first time in a little while. If he's making a motion to that effect, I'll second it.

Ms. Belcher: Would you care to make a motion, Erik?

Mr. Buckel: I just have one more comment to follow up on Erik's regarding groupings. I think if my memory serves correctly, and we just got these NS-1 guidelines or whatever they're called last week, but I think there is something in there that talks about these groupings, and I think what you want to do is you need to know enough about the list of all the species to pick the one that's most sensitive, and that's the one that you would use as your – that you would develop your reference points from and apply those to the others.

I don't think we have that information to pick the most sensitive species out of these groups. We have the data for the most abundant or the ones that have the large fisheries for, so that would not be appropriate for some of the others would be my guess.

Mr. Waugh: In addition, the guidelines talk about if you do have a species group and then you are looking at the harvest of what would be minor species, you can allow overfishing of some of those minor species, but you have to ensure that they don't go below their minimum stock size threshold, which sort of begs the question if you what the minimum stock size threshold is, then you'd set your individual species and wouldn't have them in the grouping. The guidelines, to me, the way I would interpret that, preclude the idea of using a grouping to sweep some of these unknowns under the umbrella of a known.

Dr. Williams: And I'll add I think the better way to try to handle some of these species under the guidelines is this ecosystem component category. A lot of these would probably fit into that and we can, quote, sweep them under a different rug.

Ms. Belcher: So, again, is there a motion from the group on what we'd like to see? Okay, there is current verbiage on the screen at which we're hoping will turn into a motion.

Dr. Williams: I'll move that there is no scientific basis for the shallow water and deep water species groupings proposed for Amendment 17 and that the SSC cannot recommend OFL or ABC levels for the grouping. That's as far as we need to go.

Dr. Buckel: I'll second that.

Ms. Belcher: Okay, any further comments or discussion relative to this motion? Seeing none, I will the motion to the group for a vote. All those in favor of the motion as currently written, please raise your hand; all those opposed. The motion carries.

Mr. Carmichael: Gregg, does that take care of it?

Mr. Waugh: Yes, that takes care of it. To that second part that got removed, it would be helpful – not now because this takes care of Amendment 17, but for the Comprehensive ACL Amendment, that's where we would be looking to move some of those species into this ecosystem group, so we would look for some guidance from the SSC at your next meeting dealing with that.

Ms. Belcher: Okay, with that, we're sort of caught up on the agenda. All the agenda items are done. Obviously, we missed our work session this afternoon. I'm going to ask folks if you have some time this evening, try to capture some of the caveats that we've discussed that we need to get captured into the report since it's fresh in your mind. Anything that's fresh to you, please capture so we'll have it for the report tomorrow.

Mr. Gregory: Who are the lead report writers for each topic we've discussed?

Ms. Belcher: I have not assigned anybody as lead because the hope was when we did the breakout that we would just get together relative – I mean, you all knew what your assignments were – get together with the people who had the same assignment as you, the two, three, four of you could all get together and just hash out the wording at that point.

I hadn't really gotten into the lead issue just because it seemed like we had enough people over the whole course of it that I thought in the breakout workgroups we could break down into those levels and get those sections written. So with that said, we are done with duties for today and we will come tomorrow morning at 8:30. We will be getting into the SEDAR assessments in the morning.

Do you want to start at 8:00? Erik has put a suggestion – Erik said 8:00 o'clock. Is anybody opposed to starting at 8:00 tomorrow morning? Is everybody all right with an 8:00 o'clock start; can we shift the time to 8:00? Okay, we're going to meet back here at 8:00 o'clock.

The Scientific and Statistical Committee of the South Atlantic Fishery Management Council reconvened in the Normandy Room of the Renaissance Orlando Hotel Airport, Orlando, Florida, Tuesday morning, June 10, 2008, and was called to order at 8:00 o'clock a.m. by Chairman Carolyn Belcher.

Ms. Belcher: I would like to go ahead and get started. We have got a few things that have popped up that we have to handle the first thing this morning. The first thing that I need from the group is we need to kind of put together a small discussion relative to the FEP Amendment that we went over the first day we were here. I have to present a report to Roger and the group next door.

Again, because it was an informational document, I don't this is going to take a lot of time, but specifically what I remember of it, which is a small amount, was that Sherry had talked about socio-economic and, Scott, both you guys had expressed an interest in seeing that some of those issues were looked at, and I had recommended that you would be able to get a copy in between the meetings since there was only one look at it.

Anything that you remember specifically to that, relative to any comments you had, that's where I'd like to see it reflected. Those of you who were tasked with that hopefully were taking notes so we can put this together relatively quickly. The other thing that's going to happen this morning is George is going to have a statement he's going to make in a couple of minutes, before we get started.

Roy is going to be coming in to express a couple of questions and concerns he had about some of our discussion yesterday. It's more relative to making sure our record is complete because of some of the decisions that we made. So with that said, I wanted to make sure that he brought them in so we could hear exactly what he was asking us and what the concerns are so that we can specifically make sure that they are handled in the report.

With that, like I said, I'm going to give us about 30 minutes to get our ideas together for the FEP; and then those of you who have those comments that want to be reflected in that, if you can bring them up to me, we'll form a document on screen so that we can have that section and then have it approved by you guys so I can present it at 9:00. Is that clear? Doug.

Mr. Gregory: The one thing I would delete on it is lobster. Do you need a report on lobster?

Ms. Belcher: When we get to the working session, yes. Technically, we really didn't have the lead, but any comments that you have relative to those assignments that you have, when we get to the working session, just pull yourselves together and get that write-up. Our biggest one that we have to focus on I think right now is 17. That's where the biggest amount of concern is, is

the work we did yesterday. Once we get through addressing some of Roy's concerns, then we will go straight into the SEDAR thing.

I'd like to try to keep the discussion relatively directed to Roy's points so that we can keep relatively on track this morning. Like I said, I know we'll be off by a little bit, but, again, this report shouldn't be too involved given the fact that this is more of an informational document and not so much an action item document. Like I said, we'll go off mike now until about 8:30, and then we'll put this together quickly and approve it.

Mr. Geiger: If I may, Carolyn, I would just like to thank you guys for your work yesterday. Staff apprised me of the efforts that were made yesterday and the work that you did, and I appreciate it. That's exactly why we convened this group. Obviously, as Carolyn addressed, there may be additional work yet to be done, and I have every confidence that you will be able to work through those issues. But, again, thank you for your diligence yesterday and your hard work and the tough decisions.

Ms. Belcher: All right, I need language so that we can put it through a computer so that everybody can read it and we can get approval. Sherry, how much time do you guys think you're going to need?

Dr. Crosson: We went through – she started at one end and I went coming back from the other end and found a lot of the different problems, you know, giving a review and just looking at all the different social and economic sections for these different species that are listed under this document. Are you looking for sort of a catalog of the major problems that we saw?

Ms. Belcher: You didn't express them as specific items. The big thing is that – the purpose of the report is to encapsulate our discussion. With the particular informational items, if you had brought it up during the meeting, then, by all means, put it into the report. Otherwise, if you have overall concerns relative to the socio-economics and that you're requesting for a chance to second review to see how those are going to be addressed, then that's probably the best statement that we can add to that.

We don't need to get too caught up in the details of it right now. It's just more or less if the detail wasn't expressed and it wasn't a point of concern during discussion, I would hope we could just kind of keep it general. Okay, once we determine the language of what you want me to present next door, Roy is not going to come in, but he has asked Erik to kind of put the discussion to the group.

What I'm going to ask is in my stead, while I'm gone, Andi will just kind of keep the discussion going between you, but Erik can kind of give you a little bit of background on what is being asked, but the main thing that I want everyone to focus on relative to what we did yesterday with 17 is making sure our record is very clear as to why we did what we did for those suggestions of how we were going to come up with the OFLs and the ABCs, so that way it's clear to everybody so that when it gets called forward, that we have a sound record of how we got through the process and why we arrived at the station that we arrived at.

So, that's the main thing relative to what Erik is going to tell you. That's where I think our strongest argument and defense is going to be in that when we get ready to do the report and write up that section on 17, that we need to make that the strongest portion of our report, because that was the bulk of our work and that's the bulk of our progress. Andi has what Jeff and Marcel and Alex had come up with relative to just our general overview from the FEP. I know it's obviously been a hard two days remembering what the FEP was. Obviously, it wasn't an action item for us.

It was more of a general comment and guidance section, so this is, again, what they felt was the synopsis of our discussion that day. And then to this, I'm going to ask Sherry and Scott again just for a general statement of what you felt with the socio-economics. Read what we have thus far and then we'll add to that, I guess.

Dr. Crosson: There is just a general concern that a lot of the social and economic data that's in here is outdated or piecemeal. There are some sections that are left incomplete, indicating the data will be added later. We would like a chance to look at those when they become available. Is it going to be the SSC as a whole that would like to look at this or just the social and economics?

Ms. Belcher: Ask the question again, I'm sorry.

Dr. Crosson: Well, I know Sherry and I would like to take a look at it because a lot of the data that's in here stops in the late nineties, and some things are definitely outdated. There is no longer a menhaden plant in Beaufort, for example. River herring is under a moratorium. A lot of this stuff is seriously outdated, and those things need to be addressed. Then, again, the sections that are incomplete need to be filled out and we need to have a chance to look at them.

Mr. Waugh: Carolyn, I'd suggest that you be a little more firm than saying you would like to see it. What you're saying now is it's not based on the best available data, and so I would suggest that you indicate that the SSC should see this before it's finalized.

Ms. Belcher: But, I don't know that we've ever made a motion to say that it's not best available. We've been asked for guidance on it; we've not put a motion forward that's made that endorsement.

Mr. Waugh: Yes, and maybe you don't need to say that, but I mean, clearly, the data in there are so outdated that you guys have got to see it again. My only suggestion would be don't just say you would like to see it. It seems to me it's got to come back to the SSC. Whether that's done at a formal meeting or through some mail review, I'd just urge you to be a little more direct.

Ms. Belcher: So how does the current working look, and, again, we'll make a motion relative to this or have a motion made relative to our accepting this item. Go, Scott.

Dr. Crosson: Actually, you can actually take out those first few words. The socio-economics sections of this are incomplete and piecemeal. It's not even a concern; it's just a fact. Take out the first five words and then start with "The socio-economic sections of this are incomplete or are piecemeal and some are outdated. For these reasons it is not the best available science and the SSC requests the chance for further review before the FEP is finalized".

Ms. Belcher: So how does the wording look for everyone?

Dr. Larkin: Well, if we're getting another review, that's probably acceptable. I mean, it's a hard document to review because it's almost 900 pages. You know, in terms of the citations you see this quote in the middle that will say something like "from SNG Amendment 13C," and you don't know where that starts and where that ends. A lot of questions in terms of incomplete are where is this information coming from; and in terms of some detail, it will use a reference from 1979 and present dollar values; and you're like, well, did that just come from that document or have they been corrected for 2000 dollars or 2003 dollars?

And it's not just economics, too. When they talk about – there is a section in here for the pelagic longline sector where they look at bycatch numbers, and the numbers are taken from an experiment, I think, but extrapolated out. I don't know if they're valid or not, but the numbers go from like 14 to 400. I mean, it's in there, but I don't know about the details of that. Hopefully, if we think that this is strong enough for them to sort of go through and put a consistent story together and complete all the references, then that's fine with me.

Mr. Waugh: Could you just clarify – it says Fishery Ecosystem Plan; maybe add Comprehensive Ecosystem Amendment, too, because I think some of the things you're discussion now are in the Comprehensive Ecosystem Amendment. There are probably some of them also in the plan, but I think your comments apply to both.

Ms. Belcher: Sherry and Scott, would it be possible for you to provide some of those specific concerns in an e-mail to Roger. Roger said he was willing to take in additional commentary through the end of July from you. If you could give him specifics, I think he would appreciate that.

Dr. Whitehead: Just to follow up on Sherry's last comment, maybe instead of socio-economic sections, it could be several sections of both the FEP and the Comprehensive Ecosystem Amendment are incomplete since it's not just socio-economic sections.

Ms. Belcher: Okay, any further wordsmithing to what is up there? Okay, what I will do for the record is read what the current section for the report is and then I'm going to ask for a motion as to the section being accepted by the group so that we can go ahead and put it forward as our submitted report to this particular group.

What we have is the "Fishery Ecosystem Plan and Comprehensive Ecosystem Amendment. A presentation from Roger Pugliese on the FEP/CEA was made to the SSC. There was a concern that fishing activity occurred within the HAPC. It seemed contradictory that fishing was occurring in the HAPC, but that there wouldn't be an impact on coral habitat. Staff explained

that the HAPC was a mosaic of habitat – they had high-resolution mapping of these areas – and where fishing was occurring would not impact the deep water coral.

“Several sections of both the FEP and CEA are incomplete or are piecemeal and some are outdated. For these reasons, it is not the best available science. The SSC requests that these concerns be addressed before the FEP is finalized and that the SEC be granted another review of the document.” Any further discussion relative to wording? Okay, seeing none, I’m going to ask for a motion from the group relative to accepting the document.

Dr. Crosson: So moved. I move the acceptance of the report.

Mr. Chester: Second.

Ms. Belcher: Any further discussion? Okay, let’s go ahead and put it to a vote. All those in favor of accepted this section for submittal with our report, please raise your hand; all those opposed. The motion passes and the report section will stand.

With that said, I am now going to go ahead and present this next door and defer to Andi to help keep people on track relative to the discussion that Erik is going to put forward. Again, my main focus is with what Erik is going to tell you, just realize that I think our main course of action relative to the comments that will be brought up is that we need to make sure that, again, the record is complete and our report reflects all of our commentary relative to why we did the measures that we did yesterday relative to OFLs and ABCs. Erik, do you want to go ahead and brief everybody?

Dr. Williams: It’s mostly some concerns that have been expressed – and I expressed many of them yesterday during our discussions – that what we did yesterday ultimately is going to come roost as to whether it’s scientifically defensible or not. We need to have strong language or language coming from this committee on where we stand with supporting these ABCs from a science standpoint as much as possible.

One of the logical flaws that came out in what we did yesterday that is definitely I think going to have to be readdressed because it just doesn’t hold water is black grouper and red grouper. I don’t think what we did yesterday is going to stand the test of scientific scrutiny. It’s pretty clear that one of the tenants in the Act is increased uncertainty should result in increased precaution, and that translates into an increased buffer size.

What we did yesterday for black grouper and red grouper is actually the complete opposition because here is a case where we had two species without a stock assessment and yet we set the buffer size smaller for those two species than we did for the other species. There is a tremendous logical flaw in that and it doesn’t sit well with the sort of tenants in the new Magnuson Act.

The other concern is that – I think I expressed it yesterday – is that we really need to look at whether, across the board, these ABCs that we’ve set are truly scientifically defensible and what is the science that supports them, and we have got to document that in some way. I think in the

case of speckled hind and warsaw we probably have enough expertise at the table, enough indications from various sources that setting those at zero was probably justifiable.

The others I'm not sure how we're going to go down that road, but that's the main concerns right now. I think we definitely need to craft some careful language, as Carolyn said, and I open it up for further discussion from other people. And one thing, I said it yesterday and I'll say it again, you know – and Gregg Waugh is not here and not to step on his toes too much, but, I mean, yes clearly, we are getting pressured to fill in a box and put a number in a box, but our ultimate tenant that we answer to is science.

We are a scientific body. If we cannot justify what we're doing scientifically, then we have no business doing it. Our allegiance is to the science ultimately and not to whether somebody says, "Oh, you need to give us a number and put it in a box." We can say no, and in many respects we might have been better off defensibly saying, "No, we cannot set ABCs" yesterday because we don't have the control rule in place, and I would say we might even want to reconsider that idea today as well of taking all those ABCs off the table and saying, "Look, we don't have an ABC control rule in place and unless we have one we have no scientific basis for setting them." Obviously, my opinion on that is a little strong, but I definitely would like to hear others weigh in on this.

Dr. Crosson: I guess I agree with Erik on a number of these factors. I'm not happy with placing these ABCs for these groups with the information that we have. From the long discussion we had yesterday, we do have a legal requirement to provide this information. I guess this is sort of a conflict with the way that Magnuson forces this into this corner.

I mean, we have incomplete information and yet the ABCs that we have come up with here have a binding, to my understanding – I know John kind of danced around that when we had our orientation – have a binding effect on the council, and that, unintentionally or not, sets us in the habit of making policies and possibly forcing the council's hand. Again, legally, I don't know what we're capable of doing here. It seems we still have to come up with these numbers. I don't know that I actually want to revisit that long discussion.

Dr. Barbieri: I think that there are some adjustments that need to be made for the ABCs and the OFLs that we set yesterday. Obviously, we didn't have a whole lot of time to discuss those issues fully, to sleep on it, to reconsider, to revisit this morning all the decisions we made, to then see if we had a consistent set of criteria for what we set. I think we need to really think as an SSC very, very carefully about the fact that we will be asked to generate these ABCs for a number of stocks for which we don't have stock assessments and that are data-poor stocks.

I think that it's just a matter of us making some decisions, coming up with a set of criteria. I think that our intent yesterday was to have these ABCs and OFLs as interim; that we recognized yesterday our decisions were a little rushed and that we needed to revisit all of these levels at some later time. I'm okay with us revisiting these levels, adjusting them according to Erik's concerns, which I think are valid concerns, but to completely withdraw our recommendations on ABCs and OFLs I think is a bit extreme.

Ms. Lange: I guess during the course of yesterday we did discuss whether or not we should be looking at setting some sort of ABC control rule, even if it was in an interim state, until we can have a chance to have the meeting that Carolyn spoke about where we would sit down and focus specifically on ABC control rules. We just sort of drifted away from that under the pressure of coming up with actual numbers; you know, we've got these ten stocks, we need to do this today, and we never really went back to say, okay, can we at least look at some interim levels; you know, again, based on the level of uncertainty.

You know, if a stock assessment is available and we're fairly confident that the number is there, we could do something. Then if we have no data, we base it on average landings over a period of time and use a higher level of uncertainty. Those were discussed throughout the course of our discussion yesterday. I guess the question is – Luiz, you're suggesting revisiting some of that discussion – and to Gregg or whoever, John, can we do some sort of an interim control rule based on the level of at least maybe two or three or four levels of uncertainty or levels of availability of data until such time that we can actually have a full discussion on it?

Mr. Carmichael: My impression, from what you all discussed yesterday, was that this motion that's on the screen about dealing with the recommendations for those stocks that were assessed is that this is kind of the default interim control rule and that you will reconsider this under the Comprehensive Amendment. There was specific discussion about adding these stocks that are assessed now as components to the Comprehensive Amendment that you have a little bit more time to deal with, and that this was simply addressing the most pressing concerns for Amendment 17 that the council has to get in place for 2010, and that you expected to do a more reasoned, more evaluated, more comprehensive control rule that could stand a longer test of time under the Comprehensive Amendment and could apply it to all species.

So, on the one hand, you know, you've taken the fish that are overfishing and you've applied this rule to these across the board for all of these species, that some members argued was not conservative not and others said was perhaps too conservative; so from that standpoint, it is a compromise based on the differing opinions of people that you as a group could compromise and agree to yesterday as – I think as Andy, who kind of championed this, and really stressed repeatedly yesterday this is an interim approach that you're going to reconsider every year.

It certainly doesn't mean that is how you would set an OFL and ABC for these stocks when they're recovered. This is dealing with these overfished stocks and the uncertainty in those assessments and the lack of true evaluations of the real probabilistic nature of overfishing, the uncertainty that you're faced with and the lack of guidelines that say it may or may not tell you how precise you have to be in preventing overfishing as sort of a reasonable compromise that goes between the old and the new, so it's an interim step

That was my impression in that sort of this is the foundation of your temporary ABC control rule until you get more information that hopefully is forthcoming and you'll put into your Comprehensive Amendment, which you will have more time to discuss, and as Carolyn mentioned, the opportunity to perhaps hold a separate meeting outside of the regular activities

that you have to do during your two meetings with the council, is to hold a separate meeting to really just focus on these issues relative to the process you must follow for dealing with that Comprehensive Amendment.

I talked with her yesterday after the meeting about is there a time we can do that and do that this year so that you're in a better place when you start getting the parts of that Comprehensive Amendment. I have talked with Gregg and I think that's something, if you all have the time, certainly the council will definitely support. So for all those reasons, I think, yes, it's an interim thing. You didn't go back and revisit the control rule, but yet the discussion around this, as I recall, was kind of like, well, this is sort of a control rule because you didn't address individual stocks in this.

You know, this kind of stands as – if you read it generally – as a control rule for those assessed stocks, and that was sort of the breakout. You have the assessed stocks control rule and you probably have a different rule for the non-assessed stocks. You just kind of left the control rule process and dealt with those non-assessed stocks as individuals, and maybe there is some control rule cleanup to do with regard to those or maybe make a motion that this is your default interim control for assessed species.

Mr. Gregory: I don't think another meeting would do any good unless we've got some data. I would like to eventually make a motion that we ask the council to ask the National Marine Fisheries Service to provide us with the probability calculations, like Erik did for gag, for all the assessed species within the next year. I agree with Erik that – in one sense what if we had taken the LENFEST report and followed that and done this in December with the LENFEST guidance that we had?

What I heard yesterday was, well, that's out of date now because the proposed guidelines have changed the relationship of some of the concepts. Well, okay, so let's follow the guidelines as proposed. Well, when the final guidelines come out, it may be different than what we have before us. So, how long is this going to take? I would say the final guidelines probably won't be out before the first of 2009, at best.

That gives one year to do what congress has asked us to do. Remember the old saying "procrastination on your part should not necessitate an emergency on my part". I think the SSC is being asked to do something that it probably shouldn't be trying to do. I agree with Erik in that respect. I have seen deadlines come and go.

I have seen councils wrap themselves up, and NMFS, too, wrap themselves up around the wheel because we've got a deadline and we've got to do this in a year, and it all falls apart because all of a sudden we've got a stock assessment planned three months after the deadline, and the whole thing changes, the whole picture of the stock changes. The uncertainty is not in the calculations we do; it's not in our knowledge or ignorance of the fishery. In fact, it is the latter, it is our knowledge and ignorance of the fishery itself.

I think we probably ought to use more common sense in thinking of these species as far as relative certainty. I liked what the LENFEST report talked about as far as looking at species according to their productivity or vulnerabilities and putting things and continuing that way, even though it's qualitative. I went along with yesterday because the system tends to want to put number in boxes.

I can remember when the 1996 SFA came out, and we were urged and I think the council finally did it, but we were urged for those species for which we had no data just to take average catches as MSY and some percentage of that as OY. In fact, if you read the technical guidelines that came out in '97, it's very similar to – they were trying to do then what is trying to be done now but with different terminology.

I'm disappointed we had a default – what we did was a default control rule for the assessed species. We didn't look at how good do we think our knowledge is of gag versus red snapper versus mutton snapper versus snowy and try to do a qualitative continuum. Clearly, I have the opinion that what was trying to be accomplished – and I guess time will tell us which one of us tends to be more accurate, but this whole process was to prevent the council from exceeding MSY, to keep the populations healthy.

That's why voted against the OY being ABC because I think it's overly stringent, and I think it forces the councils to do things more stringently than what Andy thinks. Part of his assumption was that the councils are going to have commercial and recreational sector ACLs. They may not, so you're taking uncertainty in one sector and applying it to the whole fishery.

With reference to the reds and blacks, I went back to the table in our roadmap where we've got F or OY, F of MSY, yield at OY, yield at MSY, and then OY and MSY themselves. For the ones that we had numbers for – and I'll point out that for AJ there is a mistake in the OY number. It seems to be identical to muttons. When you look at the ratio of FOY to FMSY, it's 75 percent, like the OY definition is.

When you look at the yield of OY divided by the yield of MSY – now, it's my understanding and maybe I don't understanding how this was done, I thought the F ratio should have also shown itself in the yield ratio, that you have taken that percentage reduction, but it doesn't. You have an average yield reduction from MSY to OY of 83 percent or 84 percent, not quite the 75, and some of that is skewed because for tilefish they used the OY/MSY equilibrium which was 97 percent.

But if you look at the OY/MSY ratio is it comes out to be 94 percent, so where is the red grouper and the black grouper that's at 90 percent difference, where is that out of range or out of – it seems like it's within the range of these ratios that we have for the assessed stocks for OY versus MSY equilibrium and also for the yield to OY and yield to MSY short term. So it goes from 83 to 94; what can we do different?

Dr. Williams: To that point, the fact that they are unassessed means that there is more uncertainty, which means that their buffer should be larger than those assessed species. That's the point.

Ms. Belcher: Again, if we're carrying to the point, Sherry and then – or, actually Doug and then Sherry right behind Doug.

Mr. Gregory: Well, I ask you, what are we going to do when we get to the species for which we have no indication whatsoever? Do we say it's 50 percent below average catches? Do we say it's 25 percent? I disagree with the statement yesterday that we're not to consider the impacts. I mean, we shouldn't be blind here. What we do should be measured in a common sense approach and not just this application that's, well, the greater ignorance the wider the buffer has to be. To some extent, yes, but it needs to be within some reason.

Dr. Larkin: It's really half comment and half point of clarification. If you look in general, a lot times stock assessments happen – and a good example of thinking about the SEDAR process and which species are next – for stocks that we are really, really concerned about, so sometimes it seems implied that because it's not a stock assessment, no stock assessment means more uncertainty.

Sometimes the fact that there is no stock assessment means the stock has been fine and that's why we haven't had a stock assessment. I guess yesterday I was thinking, okay, what do you do with a species that you don't have the information, and it could be either because it's fine or because it's really in trouble and it's the next one up to bat, and you have to go to other information and the most obvious source of other information is past catches.

What other sort of anecdotal observational data are you going to get into? I liked Doug's point in thinking about the qualitative and assessing how good we think this is or how bad we think it might be, and do we incorporate that in? I don't know if my first comment or question is right or not with respect to stock status. Is an assessment or lack of an assessment an indicator of good or bad stock levels?

Ms. Belcher: Luiz has kind of been waiting; so since it's on point – and then I'll come around to Erik and Christine.

Dr. Barbieri: Well, I have some comments about those comments as well. I mean, Doug, I think that this is why we need, even before we have all of these assessment data or the probabilities of overfishing and the status of the stock nailed, I think that we need a couple of days dedicated to just us getting together and discussing these issues. I mean, we're going to have to insert into this process, it's like some level of risk assessment.

There are procedures out there about risk assessments and how we want to build a control rule based on risk assessment criteria that we can borrow from and apply to this in a qualitative way until we have the quantitative data. I think it would be helpful for us to get that guidance set up

through a dedicated meeting. I think it would be useful, Doug, even before we have all the information from the Center.

But to my original point, Madam Chairman, I think that Erik's point is a good one. For the stocks for which we have the least amount of information, we were actually the least conservative, and I think that this was really not due to a lot of careful thinking. It was not an intentional decision. I think it reflects our level of comfort in dealing with this issue as the afternoon progressed.

I mean, when we started all of us were very conservative and kind of really concerned about taking the first step, and our level of comfort increased the more we discussed it. You know, to the point that Erik in the beginning said, "I don't want to have a dog in this fight whatsoever," eventually made two motions.

The more we discussed the issue, the more comfortable we became, and I think that our – there was a disconnect, perhaps, between the decisions that we made in the very beginning when we set up the first motion and the decisions that were made at the end of the session when we made the motions for the least information on stocks. So, I think it is appropriate in that sense for us to revisit that issue and gauge the level of uncertainty that we want to deal with for those different types of stocks. In that sense I think it's appropriate.

Ms. Burgess: To address what you said about not having a stock assessment means that a stock is probably okay is not necessarily the truth. Just because you don't have a stock assessment it doesn't mean that the level of fishing is okay, because it could mean that we just don't have enough data to assess that stock, so past fishing limits may not be okay.

Another concern is our ability to change these limits. We're being forced to pick limits now just by law, and the only reason we picked these limits was with the understanding that we're able to change them as soon as we get better information, but how easy is it going to be to change these limits?

It's going to take an amendment, is my understanding, to change these, so luckily we have whatever the next amendment is that we're assessing the rest of these species, so we can kind of lump it in with that, but what happens if we're not able to get these probability analyses done by that time? Then we're stuck with what we've decided today until we come up with another amendment, and then the whole amendment process takes such a long time I'm concerned that we get stuck with some of these estimates.

Ms. Belcher: To that point, I don't think that has to be the case. I think that we request that we do something so that we aren't constantly relying on what we put together. We all were under the assumption yesterday that this would be put in place in interim; and if we don't want this to be status quo, we need to be pushing to get staff to let us come together to finally hash this out and come up with a guidance document that we're happy with that will allow us to do what we want to do.

I mean, a lot of times we start the ball rolling, but we never keep pushing to try to get it past where we've just stalled it at, and I think in this situation, unless we really start pushing hard as a group to get our time together to debate these issues, we're going to be stuck in that rut every single time. We need to put ourselves forward and be more assertive as to where we can put our best effort. It's not going to be in a block of time.

Again, we had one hour allocated to us yesterday to come up with this. That wasn't feasible. We need to make that more clear and we need to best utilize our time maybe not necessarily during this venue but outside to get those points addressed. I think that's where, again, we need to think to about it in those terms and really try to push hard to get ourselves into that frame of mind of being able to do it through technical committees or however we're going to do that.

Dr. Williams: To Sherry's point and also to Christine's point, again, not being assessed has nothing to do with the quality of the data or whether the stock status is okay or not. The other thing in determining the uncertainty of stock status is irrelevant. Just to clarify, what we are doing when we are setting ABCs is to account for the scientific uncertainty in the OFL. The OFL is the overfishing limit.

There is a lot of uncertainty in that, especially when it's MSY-based, and it's based on a stock-recruit curve we know how well those data fit. Let's keep that in mind. In the case where we're using a proxy for OFL such as average catch over the last five years, that's the most uncertain estimate of OFL you can come up with other than not having one at all. The buffer between OFL and ABC in that case should be the largest we're willing to accept.

Ms. Lange: I guess to that point and also to Doug's comment earlier, we're working at two different scales when we're talking about uncertainty. For those stocks that are assessed, we're looking at the 75 percent FOY. Doug, you made the point a while ago what does that translate to in pounds or tons or the actual numbers that go out for the fishery. Seventy-five percent FOY may range from 85 to 95 percent in actual pounds, so can we get a table of those numbers; what does 75 percent FOY translate to in pounds for those stocks that do have assessments and compare it to the 90 and 95 percent that we used on the two that we're using average landings for?

Mr. Carmichael: I don't know if that's apples and apples. Maybe Erik can help. I mean, it's kind of problematic so you compare – well, take gag and take the average five-year landings and see what 95 percent of that is and then compare it to FOY that you project for next year or the year after or something – I don't know. I don't know what that would tell us.

I'm thinking that if you take one of our stocks that's been overfished and overfishing, you'd probably find that in many cases 95 percent of your – depending on, of course, the abundance, but if the abundance is low, 95 percent of your average landings could be well below what FOY could give you five years into a stock that's gotten a little bit better, you know, it's going to be so tied to where the stock is going, and 95 percent of average is probably going to be well below FOY yield to equilibrium, obviously.

I don't know; it's so tied into what the stock status is and the number of fish. I mean, it probably wouldn't be that difficult to do. I think the landings' information is there. You could certainly take the averages and look at it and see how that compares to what you're putting on the table. It could be done and it probably wouldn't be that difficult. I don't think it would help. Did you do average landings?

Mr. Gregory: This is for the species that have assessments that gave us estimates of current yield at OY and current yield at MSY. That's where we get the average of 83 percent, but that's boosted upward by the mutton snapper and particularly the tilefish where there is no yield at OY, but OY was used in that instance. Then if you look at the OY/MSY – what I'm thinking is if we didn't have an assessment, maybe a default interim rule might be – like what we did is if it lies between the assessed yield ratios and the OY ratios, we're in the right ballpark.

I mean, that's all we're doing, anyway, in this interim step. I'll point out that the OY for amberjack is obviously a typo. Amberjack and mutton can't have the same OY, and it's a fourth of MSY, which is out of range of everything else. Like people have said, OY is about 97 percent of MSY, and that's equilibrium. The current OY to MSY, we can take out some of the numbers that you think are inappropriate, and it comes down more, probably to 80 or 75 percent, 81 percent.

Mr. Waugh: The mutton figure is in kilograms.

Mr. Gregory: Well, it's ratios so it doesn't matter. See, these two numbers shouldn't be the same.

Mr. Waugh: Right. The AJ OY is 1,777,000.

Mr. Gregory: I welcome other quantitative approaches to setting OY when we don't have a stock assessment. I would ask, Erik, what would you do for triggerfish? Luiz, what would you do for gray snapper given that we have no stock assessment? I mean, would you say that we know less about them so the buffer should be even greater?

Dr. Barbieri: Just to that point, Doug, I think this is an excellent proposal as a starting point. I don't want to do it right here right now in another hour. I mean, I think that we need to reconvene and give ourselves a couple of days to have dedicated time to do this, bring a whole suite of species that are managed by the council.

We can list all of these ahead of time; the ones that we have assessments, the ones that we don't have assessments for, the ones that are in potential danger of being overfished, are in critical states. I mean, we can do all of that as homework and come to the meeting, after having put some time and thought into coming up with different criteria, but I don't think that here an hour we're going to be able to do anything that's anymore defensible, really, than what we did yesterday.

There are a whole lot of other points that we're probably not thinking about right now. When we are flying home or driving home, oh, my gosh, why didn't I bring this up, so I think to follow Carolyn's recommendation that we reconvene for a couple of days, perhaps, or a full day, if that is enough, to discuss these issues in detail and that today's discussion be limited to the levels – that we consider our motions yesterday were to define an interim sort of control rule of sorts and interim levels of ABC and OFL.

Just one last point here, looking at the ACL proposed rule regarding OY or where we are in terms of OY, the intent of this action – this is on Page 1, the very last sentence from the summary – the intent of this action is to facilitate compliance with the requirements of the Magnuson-Stevens Act to end and prevent overfishing, rebuild overfished stocks and achieve OY. I think our reference to OY as a parameter in our tentative control rule is really to try to stay true to the intent of the Act in reaching OY over time. I think in that case it is defensible.

Dr. Jiao: This table I think because MSY equals yield at MSY, which needs the kind of population biomass equals BMSY, this is the one concern that I have. I don't know whether there is something wrong with the number or maybe there is a mistake of when people prepared the table. That's one thing, the first tilefish, yes. For the others, I think in general we should get YOY scaled by YMSY because then the 80 percent, that's a reasonable value and it should be around 0.75 – just one comment.

Another thing that I want to say is because yesterday I voted to use the last five years' average yield as our fishing limit and then voted a percent of OFL as the ACL. I have some explanation because I agreed with that control rule. For black grouper, based on discussion, my understanding is that the harvest after 1990 is reasonable, is correct, or estimate is relatively low; and then if you look at the figure, we can see the yield during those years are very stable and at the same time the index keeps increasing, so that's why I'm comfortable and voted to use it as overfishing limit.

Then I agree with Erik that the buffer area with a species that is not assessed, that relatively have a high estimation of 70 should be higher, but at the same time because our OFL based on last five years' average, that's not overfishing limit, that's not FMSY, so in that case I'm relatively fine with a buffer area that is less than 25 percent difference. That's why I voted and agreed with it as an explanation. Because the figure for the red grouper is wrong, so I don't want to comment on that.

Ms. Belcher: What I'm planning to do is Doug, Erik and Luiz still have comments, and at that point I'm going to ask for us to make – I'm trying to get us back on track, Alec, but I don't want to do too much discussion. The main thing I want to see is what are we going to do; are we going to revisit our motions; are we going to try to change it? If we're not opting to revisit, we really need to move on because we do have some other items that we really need to address.

Again, I think the main thing is that if we're not going to change any motions, we need to just make sure that the report is as reflective as possible. The other thing is in talking to Gregg, Gregg said that the week of August 11th is open for us to meet in Charleston to discuss this. The

opportunity is being given to us to be able to get together to basically put our money where our mouth is. Since we've been saying that's what we want, it's being granted so we need to I think really take that into heavy consideration and do our best to meet that. It's between, what did you say, SEDAR –

Mr. Waugh: Yes, August, like a lot of other months, is very busy. The week of August 4th, we have got a SEDAR workshop. AFS is the week of the 18th, and we've got another SEDAR workshop the 25th, so the week of the 11th through the 15th is open.

Ms. Belcher: Okay, so with that stated, again, Doug, Erik, Luiz, Alex, and then like I said unless a motion is going to be made to change or come back to revisit our motions, then we're going to proceed forward and let Kyle talk to us about the SEDAR stuff.

Mr. Gregory: I'll be quick. See, I don't see the benefit of us meeting again. We have no information, and I don't think it's right to take an individual member's opinion based on his knowledge of the fishery as the reason we should go to zero in that case or something else. It seems like what we need is not a SEDAR process but a meeting of people who understand the life history and the stock assessment of these species that can give us that qualitative guidance to fill in the knowledge that we don't have. Us meeting without that information is not useful to me.

The only other comment on the ABC as OY is the statement you read is right, but that statement assumes the council is going to have some action in setting the catch levels at OY. What we did yesterday was take that freedom completely away from the council. I think we superseded what the intention was for the scientific community. Remember, the council has to do what we tell them as far as catch levels, so we're saying you cannot set ACLs at OY. You have to do something else.

Andy argued, well, they can set it right at OY, da, da, da, or close to OY. That's yet to be seen, so we took a major step and I think we overstepped our bounds and took away the decision process from the council almost completely. I think that should be revisited based on that.

Ms. Belcher: To that point, what we're asking for in a meeting isn't to redo what we've done yesterday and today. It's to start to talk about the procedural outline that we just put in, so it's giving us that time period to pull out the LENFEST, the P-star analysis, the McCall analysis, all of these different things and start doing the debates over the pros and cons of those approaches, so doing it more in a generic feel first; then ask for the specifics on how we want to go with the next step. Again, we haven't had the ability to build that protocol. We're kind of putting a Band-Aid on it right now, and we need that ability to discuss that. Gregg, did you have more to that point?

Mr. Waugh: Just to Doug's point about overstepping the bounds, I couldn't agree more. Congress took that flexibility away from the council and gave it to the SSC. What you all have done is what congress directed you to do. You don't need to concern yourselves with where the council is going to set ACL or where the council is going to set OY. That's the council's job.

Your job is to set the overfishing level and ABC, which you've done. You haven't taken anything away from the council. The council will now react to what you all have; and, certainly, that ABC is a top end of where the council can set its ACL. That's how congress laid this out.

Dr. Williams: Yes, I have to agree completely with Doug that the justification for using OY as a proxy for ABC is not correct. I think probably one of the things that's tripping us up is the actual title "ABC, allowable biological catch". I mean, in the guidelines it's clear that what ABC is meant to be is an adjustment to the overfishing level based on scientific uncertainty. So, really, we're talking about the uncertainty in FMSY or its proxy.

So I go back to Day One of my comments which is how does 75 percent of FMSY or FOY have any bearing on the uncertainty in OFL? That uncertainty is certainly specific to each assessment and we haven't addressed it for each assessment individually. We just came up with some blanket 75 percent. There is just no scientific justification for that whatsoever, none. We have the assessments. They're available on the SEDAR Website.

We have distribution of uncertainty about FMSY from almost every one of those assessments. We could have at least looked at that. We didn't even take that step. I would suggest we need to take all our motions off the table, but, again, that's my opinion. I'll add one more thing. This is a little off point. Kyle reminded me that there is technical guidance coming out on how to compute ABCs. They're working on that right now, so there is more guidance coming out.

It should be out this summer and probably finalized by the end of the year. So, once again, we're in this situation where there is help coming, but it's not soon enough. Again, everybody seems to think our feet are being held to the fire; they're not. What is going to happen if we don't fill in those ABC boxes? Nothing. Are they going to come and lock us up and haul us away? No, no. So, don't think that we have to fill in the box; we don't. Our scientific credibility is on the line here. That's what we need to be concerned about.

Ms. Belcher: To that point, Gregg.

Mr. Waugh: Yes, and then I'll back out of the discussion. What will happen is what has happened every single time Magnuson has been reauthorized. The agency is incredibly late in getting the guidance to the councils. Then when the council doesn't meet the legislative mandate, we get a nasty-gram from the agency saying that we haven't complied with the Act. The reason the Act was changed, to back up, is because congress was very dissatisfied with the progress the councils have made to end overfishing and rebuild stocks.

That's why they put in deadlines. Whether you all feel your feet are being held to the fire or not, the council process is being held to the fire. Congress is very dissatisfied with how fisheries management is being one, and they have changed this. They have put in specific deadlines, and it is the council's intent to meet those deadlines. There are deadlines that are put in there that the agency does not meet on a consistent basis.

That probably will never change, but the council is in the mode of meeting these deadlines, and they want to comply with what congress has laid out. That's why we are looking to you for getting this guidance in a timely fashion. The guidelines could have been out sooner, the technical guidance could have been out sooner. This analysis of probabilities that were done for gag, there is no reason we couldn't have that here now to be presented and used. So, make no mistake, the council's intent is to comply with what congress has laid out, and we're looking to you all to help us with that.

Dr. Barbieri: Well, Doug actually made a point about the life history and population dynamics' information of these species, which I agree we should incorporate that and we didn't really yesterday at all in our thinking about the species that some species are going to be more risk prone to overfishing than others just given their life history pattern. We didn't incorporate that into our thinking.

That's true, and to, Doug, that reinforces the need for that meeting if we can have it in August. I think it would be a significant move ahead. No, we're not going to complete everything. No, we're not going to have the quantitative information that perhaps we need to have, but I think we're going to move forward in setting up this criteria that we want to have to then put together with the guidelines.

I mean, the guidelines, by the way, are going to be general guidelines that are developed not for this council specifically and not for this suite of species but for the country as a whole. We know, having seen the previous set of guidelines, they are not going to be specific enough to give us, really, the detailed guidance that we're going to need to deal with the suite of species that we have to deal with here.

So we're going to have exercise our best professional judgment in adjusting the general guidelines to what we believe is most appropriate for the species that we deal with. And to Erik's comment, technically, Erik, I don't disagree. We had the motions yesterday, and now we are revisiting them. You know, we're giving ourselves the opportunity to go in; and if those benchmarks are inappropriate, let's change them, but I think that we have a job to do here.

I mean, we really work at the discretion or pleasure of the council, and they're asking us for this guidance. I don't know how to really go back to them with, well, we don't want to do it because the information is incomplete and the set of guidelines. All of us here are struggling with that. I think when we signed up for this, we were given a set of responsibilities to fulfill, and I feel that we have an obligation to fulfill them and to be responsive to the council with all the caveats about this being very interim and tentative at this point and that we will revisit – now I don't know about our opportunity to revisit this by this meeting in August and then adjust our recommendations for the December meeting. I don't know if that's possible according to the process or not. That might be a way for us to kind of resolve these impacts.

Dr. Williams: I know you want to move on, but what we did yesterday is inappropriate and we didn't have the information that we needed. If you look at the guidelines, it tells you what kind of information you need to have and we didn't consider any of it. If you look at Page 65, it says,

“The ABC control rule should take into account uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results and projections.”

We didn't have any of that in front of us. I cannot believe we had the gall to set an ABC without even having the stock assessment for each of these species in front of us. I mean, that's unnerving. A lot of work and effort goes into these stock assessments and then to have us just pick a number out of thin air and not even look at the assessment for each of these species on an individual basis is unnerving.

Dr. Barbieri: Then what do we do for the species for which we don't have a stock assessment or for which the stock assessments are clearly outdated and for which the level of uncertainty that's inserted into the stock assessments is actually very high, because we know that the data is insufficient, the estimates are tentative, our projections are in appropriate? I mean, how do we set those things up in those situations?

Ms. Belcher: Anything further to that point because otherwise, like I say, we're wrapping it up with Alex? Anne.

Ms. Lange: Just very quickly, that's what setting up an ABC control rule would be about, which I'm assuming with the meeting we're going to try to get into in August will be, to address Luiz's question.

Mr. Chester: This may be moot after the higher-level comments we just heard, but I was comfortable yesterday with that yield at F 0.75 MSY represented a consensus among the group in terms of those who wanted to be more conservative and perhaps more allowing. But, I think we have to be very clear that what we were looking at represents scientific uncertainty around the assessments.

I'm a little concerned about just the verbiage of using FOY and exactly what FOY means to the council and what the underlying rationale for what their original 0.75 was. We talked about that a little bit yesterday, but I'd like to hear a lot more discussion perhaps in this meeting because I think we risk being misunderstood as going beyond our mandates to talk about scientific uncertainty.

I think OY really represents some adjustment based on economics, social concerns, uncertainty which could include both scientific and implementation uncertainty. I'm comfortable that the 0.75 standard is what we intended, but I think, as I said, that might be confusing that we are actually considering more than what we really ought to be.

Ms. Belcher: So with that, what's the pleasure of the group relative to our work yesterday? Are we putting a motion on the floor to – Scott.

Dr. Crosson: I move that we move to the next item on the agenda and leave yesterday's work as is.

Ms. Belcher: Do I have a second?

Dr. Barbieri: Well, I'm not ready to second that as yet. I mean, I really feel that we still need to address this issue. Perhaps the language that we produced yesterday; have we really made the point of – right, but, in reaching consensus that is the right course of action to amend – you know, make a motion to amend the motions that we made yesterday setting those ABCs and OFLs.

But going beyond that is also do we have there enough language really to express to the council what Marcel had brought up, that this is really back of the envelope, that we did this with ad hoc procedures, and that we did it with the full intent of revisiting these recommendations whenever possible? Erik, at this point you would make a motion to actually remove all those and go back to –

Ms. Burgess: I feel like we don't really have enough time to be able to cover everything we need to cover, but I think Erik is right with the fact that we didn't even look at the stock assessments to assess the level of certainty of those benchmarks. I move that we revisit each species and consider each stock assessment that we have and the level of uncertainty and take that into account with these ABC limits.

This is not to undo what we did yesterday. It's just to kind of take a second look and based on how we feel about the estimates from the stock assessments, to kind of revisit those and see if they need to be adjusted any.

Mr. Carmichael: Let's make sure we get the procedure right. Is this a valid motion? Do we need to make a motion to rescind those previous motions and then simply start anew? Perhaps it has to be individual motions to rescind individual motions, and I think it takes a two-thirds vote to rescind.

Mr. Waugh: But, John, I thought Christine said her intent is not to do away with what was done, but to come back and look at each individual species and see if the previous decision needs to be changed.

Ms. Burgess: That's correct.

Mr. Carmichael: Is this to be done here and now?

Ms. Burgess: Yes. I mean, I know we don't have time, but it should be done in the interest of science.

Mr. Waugh: I think, too, we have to be realistic in the workload and you have other stuff to get done. This could be done at that August meeting and the results presented to the council at September. We've got some guidance that as staff we can take as an alternative and build in some alternatives higher and lower than those, such that we would have some idea of the level of

impact associated with other alternatives you all might come up with. This could be accommodated at that August meeting and then presented to the council in September. I don't see how physically you could do that at this meeting.

Dr. Reichert: We are talking about those four species that we made motions on yesterday, correct?

Ms. Belcher: Christine is talking about all the species, all ten species.

Ms. Burgess: No, the ones that we have assessments for.

Ms. Belcher: Well, we'd still have to revisit the other four because – I mean, to me the four individuals that we addressed probably carry as much issue as the other ones do.

Mr. Gregory: To what you just said, what issues? What are the issues? I mean, our discussion is the administrative record for what we did. If the council disagrees with what we did, let's be explicit, what are the issues?

Ms. Belcher: So, what's the pleasure of the group? Do we have a second for this motion that's on the board?

Dr. Barbieri: Christine, just one second. I think you need to be more specific on what timelines for this you have in mind. If it's here and now, if that's your motion, I think you need to express that because some of us have been asking for this August meeting, and that will give us the opportunity to do exactly that.

Mr. Gregory: Again to my last comment, why are we revisiting this? Did we get advice from NOAA General Counsel that the administrative record was incomplete and that we need to justify what we did? Why are we reconsidering what we did yesterday?

Ms. Belcher: The request was – and this is the problem. Quite a few folks were approached as to our reasoning and logic behind the decisions that we made yesterday, and it was felt that a lot of folks really weren't clear on why we did what we did. Therefore, it called into question our ability to defend it. And that's why I said again focusing on documentation relative to the reports to make sure our intent is clear with what we were doing, was why I wanted to keep us close to that.

Like I said, that was the main focus of it was to make sure that we had all that together. I wasn't expecting us to be sitting and looking at rescinding our motions from yesterday or anything like that. It was just to make sure that when we put our report forward and I went in tomorrow – and, again, I'm going to go in tomorrow and give a report.

I don't know how many people are going to be here tomorrow, but all of the answers are going to be looked to from me; and if I do not have a means by which to look at that report and pull all of that information forward, I've just made us look like we totally pulled it out of the air, and I

don't want that to happen. That was where, again, the concern over our record was to make sure that we have nailed it down to the best of our abilities is all I was asking for was because of that specific concern.

Dr. Barbieri: Just a comment to that point; okay, I'm comfortable with the rationale that we used. The rationale that we used yesterday set very conservative ABCs. I mean, having inappropriate information, I think we are consistent with our concerns here and with the issues that Erik brought up. Not having all the necessary information, all the life history of population dynamics, stock assessment, the uncertainty, the probabilistic approach, not having all of that, we decided to set up an interim control rule that sets those ABCs at a very conservative level that will keep the stocks, according to our best scientific judgment, in good shape until we have better information to then go and revisit those levels.

The only thing that I think was inconsistent between the beginning and the end of yesterday's session was that we did not remain true to that principle between the assessed species and the data-poor species that we handled afterwards. In setting those levels at 90 and 95 percent of MSY for an ABC, we were being less conservative for the species for which we have the least amount of information. That I think is transparent and it's going to come across to the council as an inconsistency in our thinking and the rationale for developing that interim control rule.

I can explain our rationale to anybody who is asking, that in setting an interim control rule for these ABCs on assessed stocks we decided to be conservative because we don't have the appropriate amount of information to make any decisions that are more fine tuned and that may involve unwanted levels of risk, so we set them at a conservative level. We will revisit those at the meeting in August, if hopefully that gets set up, and we will adjust those levels when the appropriate information is provided.

So, to address Erik's comments, I think if we just go – and I'll stop talking and end up making a motion eventually to that end. But, all we have to do is look at consistency between our first motion and following motions and the level of uncertainty that we used in those. If we as a group agree with that, we can move forward.

Mr. Gregory: We were put in a situation of coming up with something now without all the information before us. I don't know how to use subtle words like Luiz does and I get chastised for using strong words like "arbitrary", but we were chastised yesterday by John, I felt, for not having done this earlier. All these stock assessments have been around for years. It's not like we couldn't have had them at this meeting, so I'll throw some of the burden back on staff that if they were here today we could have done some of this.

It is difficult, and Erik is more of a purist in this and if we're going to do it we ought to do it right, but we were told, "Well, you've got to give us a number now," so we came up with these interim control rules. And, if our ignorance leads us to more precaution, and if I understand the precautionary principle as it's applied or trying to be applied in other industries, then would we not tend to say that for those species for which we do not have stock assessments we should probably not allow any harvest until it can be shown that harvest is sustainable?

I mean that, to me, is what I understand the precautionary principle is, but I think it's a strong stance and I wouldn't propose that, but we're caught in the middle between OFL equals ABC equals the average of five years of catch and what I just said. Now how do we choose the level in between those two extremes? We don't have scientific basis for doing that. That's the conundrum we're in with those four species.

Mr. Carmichael: All of your assessments are here, they're all here, they're all on the internet, they're already here in my computer and Andi's computer and Erik's computer. We'd be glad to put them up on the screen page by page and go through them, so it's not like the information is not here and readily available. If you'd like to talk about it, we've love to. The only thing you were chastised about for December was not telling us what you wanted to see at this meeting to do that.

No one said we want to see the assessments and the uncertainty around FMSY. No one said anything, no one gave staff any guidance to the information that you wanted to see. That's why we've discussed another meeting to get that guidance before we get the people together to do the work. I think it's a multi-step process.

Dr. Crosson: Again, I think a lot of these decisions about uncertainty are things that are best left up to the council. What I was wondering is whether it would be useful for you, during your presentation tomorrow morning, for us to draft not a resolution but some kind of motion expressing the uncertainty with which we set these ABCs. I think if the council had that in combination with the numbers that we produced, then they can make these decisions.

I just hesitate for us to go in there and step in and tie the council's hands and move into that policy-making process. I mean, there's a lot of biological uncertainty. We can express that, and it would be helpful for you to have something coming from the SSC to that effect and emphasizing the caution with which they should take those numbers. Maybe that might be useful for you.

Ms. Belcher: That was kind of, again, the language I was hoping for was a quasi-disclaimer from us. That was what I was hoping was going to be what we could use, again, to help explain ourselves in that situation. Erik.

Dr. Williams: To that point, then, what if we – not that I'm making the motion yet – what if we made the motion that our ABCs were set in such a way that they account for stock assessment results, time lags and updating assessments, the degree of retrospective revision of assessment results or projections? Would that be fine with such a motion?

Ms. Belcher: Well, we've got a motion on the table – we don't? Christine.

Ms. Burgess: Okay, two things. One is to address Scott's concern about the level of uncertainty. There are two kinds of uncertainty. There is the scientific uncertainty and then there is the management uncertainty, and it's our job to take into account that scientific uncertainty. We

leave it up to the council to come up with the management uncertainty as in implementing the regulations and how well the regulations are able to be monitored and actually are effective.

That's our job to come up with the scientific uncertainty. That's the whole point of ABC and that buffer zone. We have some of the data. We have the assessments, but we haven't looked at that. My intent in this motion is to at least look at the data that we do have available. If we look at those assessments again in the meeting, if we have a meeting in August, are we able to change in the September council meeting our recommendations that we made yesterday?

Mr. Carmichael: My impression is that would be the intent of what you would try to do in August is to have some alternatives available for the council in September. Isn't that what you said you wanted to do?

Ms. Burgess: Yes, I was just asking if in fact –

Mr. Carmichael: So procedurally you can. Practically, whether or not you can pull it off, that remains to be seen. That's up to you all.

Ms. Burgess: Well, the whole thing is, is we do need to look back at these assessments because we're assuming – we made those decisions assuming that all of those estimates of FMSY and FOY were adequate. We didn't assess the level of uncertainty in those estimates, which I think is what Erik is saying. I think that needs to be revisited. I don't have a problem with doing it at an August meeting because obviously we don't really have time today.

Ms. Belcher: Okay, unless there is anything else to this specific point, we still have to deal with whether or not we're going to obtain a second for this motion that's currently on the table.

Dr. Barbieri: Well, Madam Chairman, I proposed to Christine an amendment to your motion that would extend the species revisited and not just to those that we have assessments for, but basically we would put together Erik's statement as part of this motion, and basically we are telling the council, through this motion, that we recognize the high level of uncertainty with the process that we undertook here yesterday afternoon, and that we are setting up ourselves a timeline to revisit this issue and to make a revised set of recommendations for their September meeting. So, all we need to do is add Erik's very well-phrased disclaimer there or caveat and then we extend this to all the species and shazam.

Ms. Burgess: Yes, I think Erik and I are trying to say the same thing, but as far as incorporating those other species how are we going to be able to decide anything different from what we decided yesterday on those species?

Dr. Barbieri: We will, between now and this August meeting, put some thought into what kinds of information – there are all sorts of information beyond stock assessment information that needs to be taken into account, the species' life history, the level of natural mortality, fluctuations in abundance, how many species are driven by specific year classes and then

fluctuate a lot, how many species are driven to the point where you don't have a stable age structure over time?

All of those things beyond just a quantitative assessment, we can make good judgment calls and make recommendations according to Doug's suggestion. There are a whole bunch of qualitative types, fisheries live history and population dynamics' information that can be incorporated into this, recruitment variability, all sorts of parameters, but we need to give ourselves the appropriate amount of time and I don't think we can do it here.

Ms. Burgess: I'm for that so I don't mind changing it we think that we can come up with anything better than we did yesterday.

Dr. Jiao: I do agree with Erik. If we have a formal stock assessment for each species and the results are well presented, for example, the mean value, the variance of a constant interval, that would be great. Maybe in the future the document should be prepared in that way. I have another, but it's not related to this statement.

Many of us are concerned about the 0.75, and I personally don't like to use 0.75 directly, but I have some slides that may help us to understand what is the corresponding risk level by using 0.75. I just wonder whether it's a problem to present here, just two slides, so you can look at it very quickly.

Ms. Belcher: At this point do you want to see it or is this something that we should hold off and look at with the August meeting? I mean, I'm not trying to put it off if it's something that people are interested in seeing.

Dr. Jiao: It just shows the corresponding risk level if we are using different values. For example, if we have a variance of CV of FMSY equals 30 percent equals 40 percent, and then the fishing mortality over the CV of 30 percent and 40 percent, what is the corresponding risk of using different values like F scaled by FMSY. Maybe you can see it very quick, so we can get a very quick understanding of the corresponding risk levels using, for example, 0.75, is widely used in this area.

Dr. Barbieri: I understand that this is very valuable, but my issue is not all stock assessments, as we know, are created equal. We are going to give different stock assessments from a surplus production model to a plain vanilla VPA, to a statistical catch at age, you know, catch-at-age analysis completely different weight and the parameter uncertainties associated with those assessments. You know, there are some qualitative issues here.

There is our comfort level with the stock/recruitment relationship; can we actually come up with estimates of MSY that are reliable? So, all those things that I think – understanding your issue, but to allow us to move forward, I think if we amend that and if you can bring all of this, Yan, for the August meeting, I think it would be great input that will benefit greatly the discussion.

Ms. Belcher: Thank you, Luiz. That was what I was hoping to say and didn't do so well with. Okay, John.

Mr. Carmichael: Personally, I've lost track of that motion that you had. It's probably way behind in the record and you've talked about a lot of things and several requests – nobody seconded that motion, so I think at this point you really need to put a new motion on the table. As far as I'm concerned, that motion died for lack of a second. Let's put a new motion up here and try to get somewhere with it.

Dr. Barbieri: Erik, are you willing to add the text, because what you wrote there is excellent and expresses our discomfort with the lack of information and the uncertainty that we have here?

Dr. Williams: I would prefer it stand as a separate motion, my text.

Dr. Buckel: Erik, how soon – I know we talked around this point yesterday, and I guess we should have requested P-stars for some of these species, and I guess we didn't know all the species that were going to be in this. What is the timeline if we put a request in for those, that the SSC put a request in for those? Probably not the August meeting or is that possible?

Dr. Williams: Again, I have trouble answering for workload issues for the Center, but it might be difficult because it would certainly fall on the burden of our lab and we're in the middle of a SEDAR right now. I can't really say for sure.

Dr. Buckel: Erik, do you think it would be helpful even if we had one or two more P-stars? The gag P-star has been I think very helpful. At least for me I was comfortable with the 75 percent FMSY because we knew that for gag that was a 30 percent chance of overfishing, but that was only for gag. If it could be done for maybe one other stock that's on that list of assessed species maybe that's a little different life history that you feel that could give us some contrast, that might help that group in August.

Ms. Belcher: Any comments on the wording? What is the question mark, John?

Mr. Carmichael: Well, you evaluate uncertainty in individual assessments. That's only applying to assessed species, so if there is something you'd like to add that you will consider for those unassessed species, because if you don't have any new information what exactly would you revisit relative to those species come September, so I think we'd like a little clarification about what you would like to consider for those four species.

Dr. Barbieri: Well, uncertainty in individual assessments, life history – well, you already have that there – life history and population dynamics' information, fishery status and trends.

Dr. Buckel: John, real quick before you make a motion on that, is the council staff going to be putting together this information for the unassessed stocks; and if so, would length-frequency distributions from the fishery fall under one of those categories in your mind?

Mr. Carmichael: We'd probably be putting a request to the Science Center to provide a lot of this information because that's the analytical arm that we have.

Ms. Belcher: Okay, so is everyone happy with the current language?

Ms. Burgess: Yes, I mean, ideally that would happen today, but we don't have time today so that's why the August meeting.

Ms. Belcher: Okay, with that said, can you have the motion read into the record? The previous motion died for the lack of a second, so with that we've put forward a new motion on the table, and, Christine, if you would have that read in for the record.

Ms. Burgess: I move to hold an SSC meeting prior to the September 2008 council meeting to revisit OFL and ABC recommendations for Amendment 17. The committee will evaluate uncertainty in individual assessments and the probability of overfishing at various exploitation levels for assessed stocks. The committee will evaluate life history, fisheries trends and population dynamics' information for the unassessed stocks. The committee will develop OFL and ABC recommendations.

Ms. Belcher: Do we have a second.

Dr. Barbieri: Okay, I'll second.

Ms. Belcher: Seconded by Luiz. Do we have further discussion? Okay, seeing none, I'm going to go ahead and put this to a vote. All those in favor of the motion, please your hand; all those opposed; abstain. The motion carries. Okay, at this point, Erik, did you want to make an additional motion relative to this?

Dr. Williams: Let me see if I can get the wording on this right. I move that the ABC levels set by the SSC do not account for uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results, nor projections.

Ms. Belcher: Do we have a second relative to the motion?

Ms. Burgess: I'll second that.

Ms. Belcher: Seconded by Christine. Do we have any further discussion?

Dr. Barbieri: Is it necessary to add that these are levels set at this meeting by the SSC?

Ms. Burgess: It says previous motions, but the motion we just made would take that into account. It just hasn't been done.

Ms. Belcher: Would you reread your motion for the record?

Dr. Williams: I'll reread the motion: I move that ABC levels for Amendment 17 set by the SSC in previous motions on Monday, June 9th, 2008, do not account for uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results, nor projections.

Ms. Belcher: Do you agree with those revisions as is?

Ms. Burgess: Yes.

Ms. Belcher: Okay, so the second went through. Further discussion? Anne and then Andy.

Ms. Lange: I guess I would wonder about putting in a phrase after the word "move" that it's the SSC's opinion that those – or that we want to acknowledge that the levels that we provided previously – I mean, as opposed to just moving that the levels don't do that. I mean, it's how we're interpreting it or whatever.

Ms. Belcher: This is your motion so how would you propose to amend it? Andy.

Dr. Cooper: I apologize; another commitment kept me from getting here. I'd say possibly a friendly amendment "do not formally account for uncertainty". I believe in the discussion that's one of the reasons why we chose FOY is that we were informally accounting for those things. We do not formally account for them, but that was part of it, so if you would accept inserting "formally" between "not" and "account" as a friendly amendment, I propose that – or perhaps "statistically". If any of those terms might be a friendly amendment, please choose between them.

Dr. Williams: Actually of those, I would say "explicitly".

Ms. Belcher: Okay, Yan, to that point.

Dr. Jiao: Not exactly to this point, but I just think even we do formal stock assessments hasn't been resulting probability way. We still need to think the risk level that we would like to accept. That's still a subjective arbitrary, and we need to think of this eventually, even though after the meeting the results I presented the risk weight probably we still need to discuss for each species what is the corresponding level of risk that we need to accept.

Ms. Belcher: And I think we'll be able to discuss that when we reconvene at the next meeting.

Dr. Larkin: So the statement just states something that we feel about what we did yesterday. Should it be stronger to state that when that information is passed on, that this be included with it? Is that what we're doing just by –

Ms. Belcher: By making it a motion, it's something that we automatically – when I usually go in and do the report, the motions are the first thing that go into that list; and then any further

discussion that we've had to back things up, I usually give background but generally those are the first things that they'll see are our motions. With that, Erik, back to you again.

Dr. Williams: I'll reread the motion. I move that the ABC levels for Amendment 17 set by the SSC in previous motions on Monday, June 9th, 2008, do not explicitly account for uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results, nor projections.

Ms. Belcher: Christine, are you still okay with that?

Ms. Burgess: Yes.

Ms. Belcher: Any further discussion. Seeing none, we'll put it to a vote. All those in favor of the motion, please raise your hand; all those opposed. The motion carries. With that said, I'm going to give us ten minutes for a break, because we really have a lot more to cover; and the more time we spend, the less time we have for our report.

Mr. Carmichael: When you do your written report, please be explicit and detailed in what you would like to be presented with for your special meeting. Tell us the data sources that you would like to see. If you do not tell us in writing, we will have a hard time reading your mind and reading between the lines to figure out what it is you want. Please write it in your report exactly what you want at this meeting and how you want it to happen, and we will make it happen for you.

Ms. Belcher: Okay, we're going to go ahead and get started. We're looking at SEDAR 15 assessments. We have three presentations. We have the red snapper assessment. Dr. Kyle Shertzer is going to present that. We have greater amberjack which is Erik Williams and the mutton snapper assessment, Dr. Joe O'Hop.

Dr. Shertzer: Well, the last discussion was fascinating, but we'll start to change gears. This is on the Red Snapper SEDAR 15 Assessment. I'm going to try to just run through rather quickly highlights of the assessment since it has already been through the SEDAR process, including the review. The topics I'll cover here are the model itself, and I'll show some of the fits to the data results from the model and some of the sensitivity analyses that were run, the secondary model, the surplus production model, and then some of the population projections that were run from the catch-at-age model.

The base assessment model for this was an age-based population model fit to data from 1945 through 2006 with the sector-specific landings. We had age-and-length compositions from the different sectors and indices of abundance. There were three of them and they were, in this case, all fishery-dependent indices. The model was really the same formulation that we've used in previous SEDAR assessments, and it was tested in this case on simulated data and it provided the same results that we like to see, which was the real answer, so we were pretty confident that the model was performing correctly. This was implemented with the AD Model Builder Software. .

Just to run down some of the features of this particular catch-at-age model, we had the age-varying natural mortality, which was based on the Lorenzen Curve, which the mortality decreases with age based on size of the fish. There is an age-length conversion matrix which assumed the normal distribution of length at age, and the CV around that was estimated by the model. We fit landings with the Baranov Catch Equation.

We assumed for the fishery-dependent indices that catchability was increasing 2 percent per year to account for basically technology creep. This is something that has been done in previous SEDAR assessments. We used that as the base run but looked at a range of values from zero percent to 4 percent, so zero percent may be the previous standard assumption that catchability is not changing over time, constant Q .

This model had a Beverton-Holt Spawner/Recruit Model. We allowed the first order on an auto-correlation or at least estimated it. It could have been estimated as zero, but in this case it was a positive correlation. The mature female biomass was what was used to predict recruitment. We did not have any composition data in some of the earlier years of the assessment so we couldn't predict recruitment deviation from the Beverton-Holt Model in earlier years, but once the composition data started in the seventies, then we could allow recruitment deviation.

There is sort of a tight conditioning in those earlier years to the spawner/recruit model and then later years more of a loose condition on the spawner/recruit model. There are three primary periods of regulations where selectivities of the fisheries were allowed to change for each of those. In the first period it was basically unrestricted fishing, and we allowed the fisheries to have a single logistic selectivity curve that was applied to all the different fisheries.

It was a single curve because we couldn't separate out the various fisheries because there was not enough composition data by sector-specific composition data. It was a single logistic selectivity applied to all the handline fisheries. In Period 2, which is when the 12-inch total length size limit started, then we could separate the selectivities out by fishery, so it was a logistic selectivity for each of the fisheries except for diving, which had a double logistic curve or a dome-shaped curve.

Then in Period 3 separate selectivities were estimated again. That was when the size limit increased from 12 inches to 20 inches. The selectivities for the indices of abundance then were assumed equal to those of the fisheries. One of the tricky parts of this assessment was trying to estimate selectivities of discarded fish. This is just a schematic to show how we did that. First, we assumed that there were no commercial diving discards from the spearfishing; and if there were, they wouldn't have survived probably anyway.

But we didn't have any composition data on the discards so we couldn't estimate the selectivities directly from composition data so they had to make some assumptions. We assumed that the discards were driven by the size limit, so this sort of step system here takes you through how these were developed. It's ad hoc but I think it was the best approach in this case.

We assumed there was a logistic selectivity with 50 percent of the selectivity corresponding to the age at the size limit, and that's this picture here, this step one. Then the slope here was taken from the estimated fishery selectivity. Then we took the complement of that so one minus that selectivity is this step two in the upper right panel, and then rescaled that to age two so that the full selection with the curve at age two or beyond, and that's this step three here, and then adjusted the age one selectivity down to 50 percent, and that was ad hoc.

We didn't have information. We just didn't think that there would be full selection of age ones by the fishery to be discarded. So we assumed it was 50 percent and then ran sensitivity analyses on that at 25 percent and 75 percent. So the catch-at-age model, it appears to have a lot of parameters, 312 if you were to count them all. I put parameters in quotes because not all of these are necessarily real or free parameters.

There are three that went into the spawner/recruit model, the steepness and the R-zero parameter and then the auto-correlation parameter. The CV of growth was another parameter. The catchability coefficients from the fishery-dependent indices, there were three of those, and then there were 16 parameters to estimate selectivity curves. You can see that the bulk of the parameters came in with the annual fishing and discard mortality rates.

These were ones that really are not free parameters because they were constrained so that we matched the catches pretty much exactly. In a model like stock synthesis, these parameters aren't even estimated. They're just to match landings exactly, but we freed the model up just a little bit in that sense. Then the annual recruitment deviations, there were 33 of those starting in 1974, which was just prior to when we had the composition data starting.

This is a breakdown of what the sources of data were and what the likelihood – how they were treated and the likelihood, so there were landings from commercial handline, commercial diving and then headboat and then the general recreational. The general recreational was – I have MRFSS in parentheses here because that was extended back prior to when MRFSS started collecting data. MRFSS starts in 1981, but the recreational data, which includes headboat data, would have gone back further than that.

Then we have discard information on commercial handlines, headboats and then MRFSS, and then the three indices were from the commercial handline, the headboat and MRFSS. Then we have length-and-age composition data from all of the major fisheries and a few additional constraints to the model which were on the recruitment deviations, an extra constraint on the last few years of recruitment deviations because there was information to estimate those, and then a constraint to keep the full fishing mortality rate down below a high level, but that's a really loose constraint because the high level was three; and if you got a fishing rate at three or above, that's really taking most of the fish, so that's not a very tight constraint.

I'm going to run through some fits to the data, and I'll try to scroll through these rather quickly. These are fits to the landings from the commercial handline. As I said, the model is rather configured to match these landings very closely so you can't, in this case, even distinguish the open circles, which are the data, from the closed circles, which are the model. That's true in

most of these fits. These are the commercial diving landings. These are the recreational headboat landings, and these are the general recreational MRFSS landings.

MRFSS here starts, I guess -- in 1981 is when the MRFSS started sampling. Prior to that there is some headboat sampling to the early seventies, but these data prior to the headboat sampling are all from a Fish and Wildlife Report where they had three years basically that were in the report, '60, '65 and '70; and between those years, this is linear interpolations. And, of course, we did do sensitivity analyses on these because they're extremely high.

These are fits to the commercial handline discards and headboat discards and the MRFSS discards. These are fits to the indices of abundance. This one is the commercial handline index of abundance. This is the fit to the headboat index. This is the fit to the MRFSS index. This is the growth curve, size at age which was not estimated. It was treated as input. It was estimated from data external to the assessment model, but the CV of the size at age was estimated internal to the assessment model. This plot here is showing the standard error around the growth curve.

Okay, now these are not directly fits to data but these are assessment results. This is showing the breakout of the fully selected fishing mortality rates broken out in color to show the different sectors, so you can see that the big proportion of the total fishing mortality rate here is made up from the commercial handline; also from the recreational – the general recreational, which is MRFSS sampling in these later years. Then there is a large proportion of discard mortalities.

This model shows the estimated biomass over time by age, and what it's showing is a very extreme truncation of the age structure during the sixties, mostly, but lots of the older fish in the early time period and then extreme truncation of the age structure, and it's been more or less stable since 1980 or so.

These are the predicted recruitments over time. If you look at the bottom panel here, this is showing the recruitment deviation, so where there is zero this was where the model was tightly constrained to the spawner/recruit curve; and then once the composition data were available to estimate recruitment deviations, that's when the deviations start, and then that translates into the recruitment values that you see in the top panel.

This first point looks a little different from the points coming after it and that's because of the way the model was initialized in Year One, and that's another thing that we did sensitivity analysis on. These panels show the biomass relative to BMSY. I guess this isn't surprising, having seen the truncation of the age structure in the previous plot, that it starts off high and then in the sixties or even earlier starts to decrease and passes the BMSY level. It goes below that in the mid-sixties and has been below it since at very low relative levels since 1980 or so.

You see the same trend in the spawning biomass, the bottom panel, spawning biomass relative to that at MSY. This is a plot of the fishing mortality rate relative to that at FMSY, so in the beginning was below FMSY and passed FMSY around 1960 or so and has been relatively high, showing overfishing since.

Now those MSY estimates were questioned by the SEDAR review and the reason why is the spawner/recruit curve. The MSY estimates rely heavily or nearly completely on the spawner/recruit curve. Because there was not a good range of variation in the spawning stock biomass, it was almost all at these low levels and we could allow recruitment variation, all of the variability in recruitment is at this left-hand side of the spawner/recruit curve, so the review panel did not think there was a reliable estimate of steepness, which in the spawner/recruit curve is how quickly this curve increases up to its saturation point.

In fact, that was going to its upper bound, meaning that it was increasing extremely quickly, and the review panel didn't buy that and they recommended using F 40 percent as a proxy for FMSY, so then the biomass reference points would correspond to the F 40 percent proxy using this unfished equilibrium value to translate the F into biomass-based values. So down at the bottom here, this is just to show the difference between the FMSY reference point and then the F 40 percent reference point on the left here, and then how that translates into SSB values on the right here.

So, the F 40 percent is a bit lower than the FMSY, so the ratios of F to FMSY then would increase relative to what I showed before. The spawning biomass at 40 percent is higher than that at MSY, so the ratio of SSB to SSB F 40 percent would be lower than what was shown in the previous relative plots.

This table, I'm just going to focus on the two sets of values in blue, which are the Fs in the terminal year of the assessment in 2006 relative to F 40 percent was around 12, so that's suggesting overfishing, and the spawning biomass in 2006 relative to MSST was down around 3 percent, so it's extremely low, suggesting overfished.

There was a large number of sensitivity analyses run on this. Those are results from the base model, and I'm just showing these relative to MSY reference points because they haven't been recomputed to be shown over the 40 percent proxies. There were sensitivity analyses run on natural mortality; low value/high value on the catchability value; the increase in the catchability whether it's zero or 4 percent; when recruitment deviation started; the level of landings in those early years, whether it was really low relative to what I showed or whether we could estimate a bias parameter in the pattern that was seen in those early years; also levels of commercial discard mortality; levels of recreational discard mortality; the selectivity of age ones in the discards; the steepness value, if it was fixed to 0.8 or 2.6; then a retrospective analyses done truncating the data back one year at a time back to 2001; and then the initial condition of what the stock size was relative to carrying capacity in the first year of the assessment, so ranging from 0.95 down to 0.5, and you can see on the columns that are highlighted in yellow here – this one is the relative value of F to FMSY is in this first yellow column, and the second yellow column is the relative value of SSB to SSB MSY.

You can see that there are some quantitative differences, but the qualitative results are all identical really to the base model, which is showing severe overfishing in the terminal year and a very depleted stock in the terminal year.

The review panel in the SEDAR review requested a few more sensitivity runs so here are a couple more. One is in this – more sensitivity runs on those early recreational landings, so whether they were half of what I showed or whether they were one and a half times what I showed, and then also the three down at the bottom here, F 34, F 35, F 36, has to do with the initial condition and applying an age structure that corresponds to an F of 0.5, 0.1, 0.15 – now keep in mind FMSY was right around 0.11, so these values range around FMSY. And, again, the results were very similar to the base model run at least qualitatively. That's with overfishing in the terminal year and a very depleted stock in the terminal year.

Okay, the surplus production model, this one has a completely different structure or model than the age-based model. It assumes no age structure. We used the non-equilibrium logistic production model formulation which was conditioned on yield, so estimate effort, and it was run through with the ASPIC software that's in the NMFS toolbox. These show the fits in a seasonal abundance; so, the commercial handline on the left.

The data here are the black circles and the prediction is the open square, the headboat, so in this case the model is predicting the same rate of depletion but occurring at an earlier time than the headboat data; and then the MRFSS index of abundance on the right. This plot shows the relative values of F to FMSY and B to BMSY, so it sort of qualitatively again agrees with the age-based model, but the results on this one are a little bit more optimistic than the age-based model.

So, again, overfishing started around 1960 where F exceeded FMSY, and since then has been well above FMSY. The terminal year is close to FMSY or estimated to be close to FMSY, but if you look at sort of the average of all these years it's closer to two. Then the biomass relative to Biomass MSY is at very low levels, though not as low as estimated in the age-based model.

Okay, now I'm now going to move on to the projections from the age-based model. The projection model had the same structure as the assessment model. The full F in the projections was split up among the fisheries according to recent estimates of F. The initial numbers at age were based on the 2006 estimates, the terminal year of the assessment, and then decremented by the total mortality rates and with initial recruits from the spawner/recruit model.

Then these were deterministic projections with the bias-corrected spawner/recruit model and then uncertainty was represented with Monte Carlo simulations. In this case the stock recovery was defined by the spawning biomass reaching that at MSY, so these have not been rerun to represent the 40 percent proxies.

The duration was based on the 20-year generation time plus the predicted 14 years of median recovery under no fishing mortality. This is the set of projections that was run based on the assessment workshop terms of reference; one for F equals zero; one for F equals current FMSY, 65 percent, 75 percent and 85 percent of FMSY; and then the rebuilding F that would allow recovery within the time horizon.

I'm just going to show results from Scenario 1, which is F equals zero and then Scenario 7 which is the rebuilding timeframe. Again, I thought I'd mention these projections are based on the MSY reference points; so if the 40 percent proxies are in the end what is used, some of these projections may need to be rerun.

This is the projection with F equals zero. I'm just going to focus on the top left panel, which is the spawning biomass, and it's showing that if F equals zero, the spawning biomass can recover to a level of spawning biomass at MSY – that's the horizontal thick line – by around 2020 in the median case. Then this is the projection with the rebuilding F , and again just in the top left panel, the spawning biomass is shown to reach its level at MSY by 2040.

Now some other projections were run that were not in the terms of reference from the assessment workshop. These are more or less bycatch projections so hypothetically if there is no – if the fishery is not allowed to keep fish for sale, there still may be a lot of bycatch and discard mortality, so that's what these projections are intended to capture.

In this case commercial diving is excluded and all fish are released, but the F that would have went toward landings is now just discounted by the discard mortality rate, so fish are caught at the same rate but then they're thrown back and a proportion of them will die because of discard mortality.

In this case we looked at several difference scenarios of discard mortality rates and F values, so the first three here are for the current fishing mortality rate for several different values of discard mortality rates, and then the last two are the rebuilding F s that would allow rebuilding under different discard mortality rates.

I'm just going to show this first one, Scenario 8, which is for the current F and then the discard mortality rates that were used in the base run of the assessment model, which was 0.9 for the commercial fisheries and 0.4 for the recreational fisheries. This is showing, again, the top left panel, spawning biomass that under current F , because of the high discard mortality rates, that the spawning biomass would not recover – it's not predicted to recover to its level at MSY by the year 2040. The end. I was brief I think to all that was done so I'm sure there are questions.

Dr. Barbieri: I have just a couple of questions just out of curiosity. Looking at the age composition, do you have any idea of the historical maximum age of red snapper in the South Atlantic?

Dr. Shertzer: Well, the maximum observed I believe was 53 was the maximum observed, and I don't know how that would translate to what wasn't observed. I don't know how we'd ever know that necessarily, but that's a pretty high maximum age observed.

Dr. Barbieri: But the age composition that you showed there reflects what the maximum age observed in the fishery is 20 or did I misunderstand that? Can you show your growth curve back there?

Dr. Shertzer: Sure. Yes, well, the model had a maximum age which was not the same as the maximum observed age, so the last group at age 20 would be a plus-group that would include everything beyond that. Let's see, maybe this show it, too, is that you can see the plus-group here estimated at least in the early years would have been a very large proportion of the population; and recently where we actually have data on the age compositions there is almost nothing in the older stage compositions.

Dr. Barbieri: And to that point, I'm just wondering about your growth curve never really reaches a good asymptotic value. I mean, the question is does that represent do you think a realistic L-infinity for red snapper in the South Atlantic?

Dr. Shertzer: Well, I think maybe you've hit two points with your questions, and one is if L-infinity is well estimated from the data, and it's the estimate from the data that we have. I guess another question is are we reaching the asymptote by age 20; is that reflecting your question?

Dr. Barbieri: Well, since this is just a model, do you have observed data size at age – I'm just thinking about something that lives to be 50-plus, if this growth curve actually gives you good parameter estimates when it's truncated at 20? I mean, basically my question is did you base this on age zero to twenty or one to twenty or did you have a growth curve that's –

Dr. Shertzer: The growth curve included all of the ages that were observed so there would have been ages beyond 20 that would have been included in the estimate, including the few fish that would have been 50 or greater than 40, but I think those data are sparse. I mean, you raise a good point I think if we actually had data from 1945, would we have a different estimate of L-infinity? I don't know the answer to that.

Dr. Barbieri: And I don't know either; I was just trying to see where your observed age composition would fit if we overlaid that on that curve and we moved the plus ages just for informational purposes. I was just curious to see – you know, continue the longevity of red snapper, you know, why you present a growth curve that has the age composition truncated from 20 on? I mean, you're truncating 30 ages basically into that 20-plus, and I'm wondering about your estimates of L-infinity then.

Dr. Shertzer: Well, again, the estimate of L-infinity, the ages weren't truncated to estimate the growth curve. The truncation was just in the model. The assessment model has a maximum age, but the growth curve came from fish of all ages that were observed. I think it's pretty close to being saturated by age 20, which maybe gets back to your question. If we ran it out to age 25 or 30, I don't think there would be much difference in the size of the fish relative to age 20. If you look at the difference in this curve between 19 and 20 there is a very, very small percent difference.

Dr. Barbieri: And one other question about your estimate of natural mortality justified using the Lorenzen Curve –

Dr. Shertzer: The scaled Lorenzen Curve.

Dr. Barbieri: Yes, scaled Lorenzen – but what was your base value or decided to use for your base run?

Dr. Shertzer: For scaling it?

Dr. Barbieri: Yes.

Dr. Shertzer: I think the corresponding Hoenig estimate; the constant value was about 0.078, 0.08 was what it was rescaled to. I think maybe some of your questions are answered in the assessment document. It shows the natural mortality vector, and I believe there is also a fit to the size-at-age data. I'm looking for that right now.

Dr. Barbieri: Kyle, don't worry about it; I was just – I can go to the assessment and get those answers. I was just curious, since you're here, if we could discuss some of those issues.

Dr. Shertzer: Yes, I'm looking at the picture on Page 25 and it's run out to the max age, which was 53; and between the ages of 20 and 53, there are not a lot of samples, one, but there is not a lot of variation around that estimate of L-infinity either.

Dr. Barbieri: Yes, I'm sorry, my fault, all of this is really documented in the actual assessment, so I can just go there and look. Thank you.

Dr. Cooper: So the large differences between the Prager Model versus the AD Model Builder Model, basically what that's saying is that the information contained in the age structure is saying that the indices alone essentially aren't telling the whole story; that the aggregated indices are overly optimistic as to what the decline has been but the age data tells us that there has been much more truncation in the age structure; is that the proper interpretation?

Dr. Shertzer: I think that's accurate, yes, plus without the age structure you have the fish that would have been immature, a lot of the biomass there that are actually reproducing, you know, reproducing in the production model.

Ms. Belcher: Any other questions for Kyle relative to the assessment? Yan.

Dr. Jiao: I have two questions about the model assumption. The first one is age-varying natural mortality; the second one is about 2 percent annual rate of catchability. I think that's very good to incorporate those kind of model assumptions. My question is whether also the accessibility analysis to test those assumptions to see how they can influence the results, to what degree.

Dr. Shertzer: I didn't catch what the second was. The first one was the natural mortality? Okay, this is a table of the sensitivity analyses, so this first sensitivity analysis and the second one are taking the same form of the natural mortality in terms of the shape of natural mortality at age, but scaling it up or down so if it was too high of an estimate or too low of an estimate, so the low M here is S1 and the S2 is the high M, so you can see the results, how they differ with those assumptions.

And the second, S3 and S4 for the Q, this is the constant catchability assumption, and then S4 was the assumption that catchability was actually increasing more quickly than what was used in the base model.

Dr. Jiao: Yes, my question is how to vary the age-specific natural mortality? For example, instead of using 2 percent annual rate catchability, what would happen if we used 0.5 percent and 3 percent? I didn't find the corresponding sections to use 2 percent annual rate catchability. I personally feel it's very hard to justify how many percent for annual rate catchability – catchability is always hard to justify so here maybe I missed some part of it, but it would be good if you can give me some explanation.

Dr. Shertzer: Two percent is an ad hoc value that's been used in previous assessments, and it's assumed to be a linear trend because we really can't, at this point, I don't think estimate very accurately what the actual shape would look like. You know, you have to make some assumption here and you either assume – if you're assuming it's not increasing, you're really assuming that the slope is zero, so that's still an assumption. We thought that it was really more accurate that catchability has been increasing.

But, you know, 2 percent or 4 percent – we have some indication, I think some economic analyses saying that it's probably in that range of less than five percent, but we really don't know what the value is or what the shape of the curve is, so we made the assumption it's increasing 2 percent linearly. I think this is something that maybe there will be a SEDAR review coming up maybe in the fall or sometime soon where we can maybe get some good suggestions on how to approach the issue.

Dr. Larkin: One think I found interesting was there were two economics papers that were referenced that did show catchability or factor increases of over 4 percent, but what was interesting in one of them is that they showed for the last – if you did an annual estimate, it was like 4.3 percent, but if you look at the last ten years, the annual estimate was actually a negative one-third of a percent due to the controls on outputs and inputs.

That would be very different than looking at the period of using an average of 4 versus a negative one-third. I don't know if anyone has tried to do that for this fishery at all like those ones – I think the one that showed the decline of one-third of a percent each year was a New England Fishery, but it seems like there are techniques out there to do that, and that would be a very different assumption that would go against some of this what we think should happen because boats get more efficient in general.

Dr. Cooper: And also Erik might be able to correct me on the specifics, but that 2 percent is also consistent with, I believe, Atlantic gag, that for the past South Atlantic gag there were fishermen at the data workshop – I believe it was the data workshop – that talked about how they felt their efficiencies were increasing, and basically it had increased a certain percentage over time, and that assessment then broke that out into an annual increase that agreed with the anecdotal evidence presented by fishermen at the data assessment workshop. I believe that was the case.

Dr. Williams: Yes, that's correct, Andy. And just to add some more about this discussion, there was some sparse literature, too, upon which that 2 percent was based, but as Sherry pointed out there is probably more literature coming out. The other thing is there are plans to hold a SEDAR workshop on this very topic, so they're going to hold an entire workshop just to discuss this issue.

Ms. Belcher: Any further questions or comments for Kyle? Okay, seeing none, thanks, Kyle. We appreciate the presentation. Now what is in front of us to make a decision relative to the stock assessment, to endorse it as based on best available science. What is the pleasure of the group relative to this assessment? Jeff.

Dr. Buckel: I'll make motion to accept this as best available science, if that's appropriate at this time. I'll make a motion to approve the Red Snapper Stock Assessment as best available science.

Ms. Belcher: Do I have a second from the group?

Ms. Burgess: I'll second it.

Ms. Belcher: Okay, seconded by Christine. Any further discussion relative to this item? Okay, seeing none, I'll put it to a vote to the group. All those in favor of accepting the motion as stated, raise your hand; all those opposed. Okay, the motion carries for the acceptance of the stock assessment. The next assessment on the list Erik's presentation on greater amberjack.

Dr. Williams: Before we get started, just to be clear – and I don't know, but we'll have to think about the procedures for this, but I clearly need to abstain from that last motion and any motions dealing with work that my lab has done or that I've overseen, and I don't know if we need to get that on the record somehow.

Dr. Pollock: Carolyn, can we get a copy of Kyle's presentation? I don't think we have that.

Ms. Belcher: Okay, Erik, whenever you're ready.

Dr. Williams: Okay, we'll get started. This is the stock assessment for greater amberjack that was done concurrently with the red snapper assessment. A quick outline of what I intend to cover right now is a little bit on the regulations and the data; go over the model; look at some of the fit to the base run model; some results and population projections.

Just to get people in the frame of mind of realizing what time certain regulations went in place, there are basically two size limits that went in place. One was a 28-inch fork length that was in place for the recreational fishery in 1992 and a 36-inch fork length for the commercial. Then there was a slight change in '99, but the '99 change doesn't affect the model in the sense of having to change selectivity or anything. It's really just that 1992 regulation.

Here is our age-specific natural mortality rate, the Lorenzen Curve. The value that was used in the assessment is in blue. Here is a quick examination of the growth curve, and that is shown with respect to the two minimum size limit regulations, the 28-inch and the 36-inch fork length. You can see that the 36-inch fork length corresponds roughly to about an age four fish, and the 28 inch corresponds to about an age 2-1/2 fish, somewhere in there, or a two fish, I should say.

Maturity; these fish mature pretty quickly. Age at 50 percent maturity is actually a little less than two years old, and they're fully mature by age four. The catch-at-age model is the same model we've used in pretty much all of our previous SEDAR assessments that have come out of the Beaufort Lab, basically a forward-projecting model. Similar to CAGEAN and stock synthesis, it uses the AD Model Builder Software. It has likelihoods, including multinomial, lognormal and some penalty terms.

As I said, natural mortality is age varying based on the Lorenzen Curve. Age-length conversion matrix is within the model and a CV parameter is estimated for that. It uses the Baranov Catch Equation; 2 percent annual rate of increase in catchability, as was done in red snapper and gag; the Beverton-Holt Spawner/Recruit Model with the first auto-correlation, as was done in red snapper, and so on; the same as what was done for red snapper that Kyle just discussed. Selectivity; here it was pretty simple. We used a logistic function for all of the fisheries. Then we also applied the fishery-specific selectivity functions to the fishery-specific indices.

Discard selectivity wasn't nearly as complicated as the case for red snapper. Here we just used a simple differencing function for pre and post minimum size limit regulation periods. Then we assumed that the diving had no discards, which I think is a pretty okay assumption. Here are the parameters in the model. As Kyle mentioned, a large chunk of these parameters are in the fishing mortalities.

They're sort of pseudo-parameters, but you will see in this case we don't fit the landings quite as well. Here are our likelihood components. We have landings, discards, two indices, all using lognormal likelihoods; and our length and age composition data from each of the sectors. The sectors included commercial handline, commercial diving, headboat and general recreational. Then we have constraints just as in red snapper.

Next I'll go over some of the fits to the model. Here are the landings. You can see it fits okay. It doesn't get some of the high points for the commercial handline. Commercial diving seems to fit okay, and the recreational headboat fits pretty much spot on. The MRFSS landings, again not a perfect fit, but the review panel thought it was acceptable. Discards; those were fit quite well.

Here is a look at the landings by sector in both numbers and weight. You can see that in the recent years the fishery is pretty much split between MRFSS and commercial handline, almost 50/50; and then headboat and diving account for a small fraction. Discards; the largest discards come from the MRFSS sector and a fair number of them from the headboat and the commercial hook and line.

Now, the indices, we had a commercial handline logbook CPUE index, and here is the fit to that; and then the headboat logbook CPUE, and there is the fit to that. This is just a look at where the fishing mortality is occurring, and the largest sectors, as expected, would be the recreational and the commercial hook and line primarily.

Here are the numbers of fish at age. We don't see quite the truncation of the age structure like we saw in red snapper. We see a little bit of some of the older ages shrinking, but overall no alarming trend here. Here is the biomass. You can note that there is definitely a little bit of a decline in biomass but not in numbers, so that's just the difference between numbers and biomass.

Here is the recruitment time series. Note we have two pretty good year classes come through in 1986 and 2001, and those were actually pretty well supported by several years of age composition data that indicated that those were real. Here is the stock/recruit curve. Here is the time series of total biomass and spawning biomass. The solid black horizontal line corresponds to the MSY level, so you can see that we are above the MSY level throughout the entire time series.

Here it is in relative terms, and you can see the fishing mortality rate below F over MSY. We had a couple of years where we dipped or popped up above the FMSY level, but in recent years we have come back down. Here it is looking at sort of a phase plot over the last ten years I think this is, and you can see here is our terminal year so we're below the fishing mortality rate at FMSY and we're above the spawning stock biomass at MSY, so we're in the happy face zone, I guess you could call it.

Here is a per recruit analysis just showing – I think probably the main take-home message here is looking at the relative relationship between FMSY and F 30 percent and F 40 percent and F max. You can see that FMSY corresponds – it's somewhere in between F 30 percent and F 40 percent. Here are those same benchmarks, but this is with respect to equilibrium landings, and, of course, the peak then corresponds to FMSY.

Here is the sort of table of final results. From the base run model, FMSY is estimated at 0.424. Here are various other benchmarks. Sensitivity runs; we didn't run nearly as many sensitivity runs as was done for red snapper, probably for pretty obvious reasons, but we did the standard sensitivity to M , using a rescaled value of 0.01 or 0.5 – well, actually, this is not rescale value. That's the Lorenzen Factor, I think.

It tested out the Q rate at zero annual rate of decrease and a 4 percent rate of decrease; or, increase, I should say. Then we started the recruitment deviations in two different years. I should add that you didn't see a fit to the MRFSS index. We computed a MRFSS index; and in the base run model, we ultimately did not use the MRFSS index. We removed it, and we did a sensitivity run where we added it back in, so this is a sensitivity with – in this lower one would be a case where we had three indices of abundance, but the base run model really only used the commercial logbook and the headboat CPUE index.

Here is just one examination of those sensitivity runs. This is looking at spawning stock biomass relative to MSY. You can see from this one of the biggest influences on the end results is this change in the catchability rate. It basically bounds all the other sensitivity runs. I'm just going to show one projection, and that's the projection at F-current, because we're not overfished or overfishing, and that just basically suggests that if we continue at current F levels we actually will see a little bit of an increase over time in both the biomass and landings; an initial dip and then an increase in the long run. I think that's it, short and sweet and to the point. Any questions?

Dr. Cooper: Could you put up that, I think two slides ago, the sensitivity runs? The rescaling to SSB at MSY; are those sensitivity runs relative to the estimated SSB/MSY for each of those models separately or is that a single base SSB/MSY?

Dr. Williams: No, that's actually a re-estimated SSB/MSY for each of those runs.

Dr. Cooper: Okay, so many of those runs are saying that SSB was, like, three to fourfold over the SSB/MSY back in the past ?

Dr. Williams: Correct.

Dr. Barbieri: Erik, just out of curiosity, I didn't see any fishery-independent indices. Did you guys have any to tune?

Dr. Williams: We had no fishery-independent indices for this assessment.

Mr. Gregory: I think the reason for the large biomass early on is that this fishery was relatively unfished. I know in the recreational side you've got this linearly declining or increasing catch rate, but that's probably unrealistically conservative given that the fish was largely catch and release, anyway. I mean, nobody was taking it to eat it, and that's why there was no commercial harvest on it until '85.

Up to '85 my impression is it was largely an unfished fishery, and what happened is as soon as people started eating amberjack the charterboat industry, which in the Keys depended on this for catch and release, started bemoaning the loss of those large fish that you find in a relatively virgin stock, and that resulted in the councils implementing fairly stringent regulations pretty quickly; I think within five years or less than ten years of the fishery starting.

Dr. Cooper: I'm not questioning that biomass was quite large in the past. It's more not often that I've seen the SSB at MSY relative to virgin to be 0.25, which is what this is saying, that relative to a virgin stock, SSB at MSY is somewhere between 0.3 and 0.25. I just haven't seen that all that often so I was curious.

Dr. Larkin: This comment really follows on the comment I made about the previous assessment, and it's really the only thing I can comment on. It's the use of economic studies that talked

about the change in factor productivity to justify the range or the use of an increasing percentage over time.

Specifically, what one of those papers did is show that if you look at both the technical increases and compare that or account for the fact that fishermen were constrained with input and output controls, what they found was that the Q essentially decreased over time. To use that reference to support this constant increase is a bit misleading.

The second paper, what it showed was – and they were looking at a case where stocks had actually increased. So if you account for the increase, then you got that high bound of 4 percent. If you removed that effect and said at worst the stock was the same, you get 0.8 percent. So if you could imagine what happens in a decline, it gets even lower. I don't know what it means for this, but that one statement, the two sentences at the end that end with the two economic references for that change, I guess my recommendation would be to strike that from the write-up.

Dr. Williams: It sounds like from what you're describing, Sherry, we might be talking about different definitions of catchability. Could you define the catchability in the sense that it was used in the analysis you're referring to?

Dr. Larkin: Well, it could be. I was just looking at this in a – in that larger 379-page document, there is a quote from the assessment workshop on Page 33 – and I don't know what it was for red snapper, but it talks about catchability and the increase linearly of 2 percent a year and a range from zero to 4 percent. The specific references are the ones by Jenn and Hannison.

Dr. Williams: Right, that's not my question. I was referring to the definition of the catchability from the study you were referring to that showed a decrease. I mean, I know what the definition of catchability is that we used for these assessments, but I'm curious about what the definition of catchability was in the reference you mentioned.

Dr. Larkin: Well, they could be different; I don't know. All I know is what I see here is that they're used to justify the range in percentage increase, and I would say it's least worth exploring whether that's applicable. I remember when I read the paper about five years ago, it seemed a new concept that, oh, when we factor in what the catchability means for some of the bio-economic models, that there might actually be a decrease because of additional constraints on the fishery in terms of additional inputs and output controls when stocks go low.

I am just saying the use here to justify the increase is the question I have. I don't know whether it's applicable or not, but it would be worth exploring. If they don't support it, then maybe take them out or rephrase them.

Dr. Barbieri: Sherry, I think this is worth discussing a little further at some other opportunity. I just wonder – I think what you said in terms of the definition of catchability could be happening if you're dealing with a completely random distribution of the fish, with the likelihood of encounters would be completely random, then catchability would be, in that case, inversely proportional to that abundance that you see happening.

In this case, you know, if we assume the distribution of the species follows some pattern and the ability, due to the development of electronics, of people to actually find them and where they find them, to return to that spot and continue finding them. And if it's predictable, like for greater amberjack, that they actually aggregate to spawn in some predictable sites around the southeast Florida area, so people's ability to just go back to those spots and hammer them has increased – I mean, I think that's the increasing catchability that he is talking about.

Actually what you brought up is I think a very interesting point, and I could see it happening that way if we are talking about events that are just randomly distributed. In this case the distribution of fish is not random – that will be my counter-argument – and the ability of the fishermen to find them is also not random. Erik, do you agree?

Dr. Williams: Yes, I mean, the 2 percent was really meant to address the technology advances. That was really what we were focusing on with that, and so that accounts for the introduction of Loran C and then ultimately GPS and the effectiveness that allows fishermen to return to stocks and increase the catchability.

Ms. Belcher: Any other discussion or comments for Erik?

Dr. Jiao: For catchability, I just have a suggestion but not for this stock assessment. I think it may be valuable in the future to use like – instead of using 2 percent annual change, use a model that suggests random work so we can see how the catchability changes over time and then we can avoid using 0.2 catchability, 0.2 value, so it might show the chain of catchability changes over time so we can say either it's because of technology changes and there may be changes because of the management policy. That's my suggestion.

I have a specific question for this stock assessment and also for Kyle's stock assessment because I found the objective function was, you know, configured for some of the reliable likelihood was used for some of the reliables, some of the square error was used, I just wonder why some of the square error was used and why not just consistently use likelihood is the question.

Dr. Williams: Some of the squares were just penalty terms, and so we didn't feel like they needed to necessarily be in a likelihood framework.

Dr. Jiao: I understand those penalty terms. My understanding is that we if use the sum of square penalty instead of likelihood penalty it can automatically change the weight of each data set and the weight for each kind of uncertainty, so I just wonder whether you have a corresponding sensitivity analysis on how those different, you know, uncertainties from each data set was evaluated.

Dr. Williams: No.

Ms. Belcher: Any further questions for Erik? Sherry.

Dr. Larkin: This again is more general because I'm really curious in this catchability and this Q, but it sounds like the – and I guess this is to Erik. He had mentioned that there is an upcoming workshop to talk about that, and I think one really interesting question from my perspective is a lot of – the two papers reference – here what they were trying to do is pull apart catchability from, you know, the results from the equipment, that results from the change in stock, that results from the management measures.

It would be interesting to flush out what factors were going to be considered in these assessments. It kind of suggests that Erik is saying that we're going to, you know, weed out and we're only going to look at the effect of the technology, so I think that would be interesting outcome at least to just flush that out so we are all on the same page when it comes to talking about the sensitivities.

Of course, that would feed into how we make our recommendations down the line for how conservative or not where that uncertainty is incorporated. If it's already incorporated here we might not need to account for it there, but if it's not going to be incorporated here we need to do it further down the line.

Ms. Belcher: Further questions or comments for Erik? Thanks, Erik. With that said, what is your pleasure relative to the endorsement of the stock assessment as best available science?

Ms. Burgess: I move that we accept the Greater Amberjack Assessment as best available science.

Ms. Belcher: Do I have a second?

Dr. Barbieri: I'll second that.

Ms. Belcher: Any further discussion from the group? Seeing none, we'll put it to the vote. All those in favor of the motion the Greater Amberjack Stock Assessment as best available science, raise your hand; all those opposed. The motion carries with one abstention. The next item is the mutton snapper assessment, which is Dr. Joe O'Hop.

Mr. O'Hop: Okay, I'm Joe O'Hop, not Dr. O'Hop. I don't have the PhD. This is a presentation on mutton snapper, the SEDAR 15 portion of it. It's basically a South Florida assessment. Mutton snapper, as you see here, is one of the more distinctive of the snappers, very recognizable. It's been in the commercial statistics since 1902 as mutton fish or mutton snapper variously.

We're pretty confident that people identify it, and there should be no problem in the catch portion of the statistics. The occurrence of mutton snapper is basically from South Brazil to North Carolina, even Bermuda and throughout the Caribbean. This assessment is going to concentrate on the U.S. portion of the mutton snapper stock. There has been some genetics work, and it shows basically that the U.S. portion of the mutton snapper population is basically homogeneous.

There are probably more differences between the Puerto Rican stock and the rest of the Caribbean and the U.S. than there is with the U.S. stock and the rest of the Caribbean. The Florida current apparently has a pretty large impact and serves as a barrier for much of the recruitment from the Caribbean, although some of the drifter work down show that some of the larvae could make it into the U.S. waters.

Basically, we're defining the stock of mutton snapper for this assessment as those occurring from Texas to North Carolina, but occurrences of mutton snapper west of Florida and north of Florida are relatively uncommon. They do show up more on the Atlantic coast, but basically we're talking South Florida, from southeast Florida and the Florida Keys up to the area that I've marked as southwest Florida on this map.

Some of the, I guess, important milestones in mutton snapper management, we had the Snapper Grouper FMP in '83; the implementation of 12-inch minimum size limits, first in Florida waters and then for the South Atlantic and the Gulf of Mexico in '90 '91. There was also the ten-fish aggregate snapper bag limit in the South Atlantic and the May and June closure – well, that's not really a closure. It's a reduction down to the bag limit for commercial harvest.

Probably the more important regulations came in '94 with the 16-inch minimum size limits and then in '99 in the Gulf following with the 16-inch minimum size. You might take a look at 1998 where the MSY proxy was defined as the 30 percent static SPR. Some of the parameters we used for this particular assessment came from the size-at-age sampling that was done. This is for individual specimens collected from '81 through 2006.

Most of the pre-fishery recruit data came from fishery-independent sampling. That's this area down in the lower left part of the curve. The recreational sampling typically gets individuals from about three to seven years old. The commercial fishery tends to focus on larger and older individuals; and mostly because of the area fished, they tend to be a little deeper for these larger specimens.

Of note also is that the tails of the curve tend to come from our sampling of longline catches, and these mainly were from – the larger and older individuals were mainly from 2000 through 2006. Up until really recently, before that mid-95, the maximum age for mutton snapper was figured to be below 20 years of age. With Mike Burton's recent publication in 2002, he was able to find individuals out to 29 and 31 years of age. With the sampling from the longline catches that were basically west of the Tortugas, we found individuals out to an age of 40 years old.

This has some pretty implications on our estimates of natural mortality for this population. One other thing to note is that once you get to about 700 millimeters, you're basically getting very little age information from the size of fish, so there is quite a bit spread around size at age. The 16-inch size limit would correspond to about 400 millimeters here.

Reproduction; one of the other sets of parameters that we need, we had a study from Tequesta and Florida Keys. Basically, we collected about 2,000 fish for this study, about half males and

half females – it just worked out that way – throughout the year to define when the spawning season occurred to look at patterns of maturity.

In talking with our reproductive biologists, they advised us to narrow down the window at which we are looking at maturity to just the spawning seasons, and we're taking that as April through June based on some of the histological work; also, admitting some of the resting stage fish which are difficult to tell from immature fish, so that left us with a grand total of about 39 fish in which to look at size at maturity.

This is the resulting curve. The length at 50 percent maturity was right around the minimum size limit. We'd like to have more specimens collected in this range, but right now that's what we're using for the assessment. The age at maturity; again, we're left with a subset of those 39 fish, so we had 32 to work from. The age at maturity would correspond to an individual of about 3.7 years old.

There is some information from aquaculture-raised fish. They were able to see individuals in spawning conditions at about three years of age, and the size at spawning was a little bit larger, about two inches higher for those spawning fish, but these are individuals that are well fed and presumably well cared for, so it's a little bit artificial.

When we took a look at the catch statistics from mutton snapper, we were struck by really an apparent pattern of commercial catches being centered along the southwest Florida and Florida Keys area, and the recreational catches tended to be located more in the southeast Florida area. There is a lot of overlap in the Keys, but basically southeast Florida for recreational; the commercial tended to be southwest Florida. That area of the longline catches come from this area west of the Tortugas, basically.

For the assessment we divided the landings into five sectors, three commercial and two recreational; hook and line, longline and a combination of traps and other gears; for the recreational side, headboat and other recreational angling covered by the MRFSS survey. The total landings tended to be in the area of 350 to 450 metric tons per ton.

There is some information for 2007 that's still preliminary, but the commercial landings and the MRFSS survey data are in. They're showing the total harvest at just over 500 metric tons so the harvests are going up a little bit. The discards that you would figure from the MRFSS B-2 releases and from the information coming out of the commercial logbooks were estimated at between 8 and 18 metric tons per year.

With the increased catches from the data for 2007, those discards would be estimated to be around 23 metric tons. Bob Muller wanted me to make sure that the different scales were pointed out that these are in the hundred metric ton area. These are in the tens of metric tons for discards.

We had several different indices of abundance we can use; four different fishery-independent surveys and five different fishery-dependent surveys. All of them tended to show an increase in

relative abundance, so that's all very encouraging signs in this particular fishery. The longer time series were from the fishery-dependent side. The fishery-independent survey had the shorter time series.

For the assessment models we considered a range of different models, ranging in complexity from somewhat simple to more complex with the statistical catch-at-age model. We used ASAP as our catch-at-age model that we were basing the benchmark results on, but we were trying to get an idea on some of the parameters coming out of the different models to see if they agreed. This presentation will focus on the statistical catch-at-age model.

First, I wanted to cover the results from the stock reduction analysis. Basically for inputs in the SRA, you need some basic biological parameters like age and growth, age at maturity. You need the catch series for the commercial and recreational harvest. The SRA estimates the vulnerable biomass that would account for the patterns that you see in the landings. For this particular time series that we set it, we used the Bureau of Commercial Fisheries Data from 1902 to the time when the general canvass from NMFS took over; and then from 1986 forward, we used the trip ticket information plus the general canvass information.

What SRA is estimating is that the vulnerable biomass was relatively stable through about the early 1950's and then started to decline through the seventies and eighties and reached a fairly low point in the early 1990's; and afterwards there is somewhat of an increasing trend in the data. The population and the vulnerable biomass showed some signs of recovery.

The ASAP model that we used was out of the NMFS toolbox. This was the first version of ASAP. We had a base run that was defined at the assessment workshop. It used an average value for steepness for periodic spawners such as snappers. We used the catch series and age data from 1982 to present. We were somewhat limited in the scope of data we could feed this version of ASAP.

We started to run into some limitations when we used the longer time series, but basically we used the five different fisheries time series models or data series and the index of abundance from those fishery-independent surveys to feed into those models. The ASAP runs were predicting a decreasing trend in biomass through the early 1990's, just like SRA, and an increasing trend through the current year.

Recruitment; fairly low recruitment in the early part of the time series, and it's predicting a little higher recruitment in subsequent years, so all very good news. These are some of the results out of the base run. You see the various management benchmarks. The council has defined the proxy for MSY as the yield at the fishing mortality corresponding to a 30 percent SPR. You see the values for MFMT and MSST are presented here. These will be plotted for all the model runs that we did.

I wanted first to go over the areas on the control rule just because they're presented probably a little differently than before, but probably nothing you guys don't know about. Basically the spawning stock biomass at the fishing mortality corresponding to 30 percent SPR is shown here.

You have the SSB current over SSB at that fishing mortality. You have the fishing mortality current over the fishing mortality at 30 percent SPR. This broad line gives you the MFMT; the dotted line gives you the MSST values.

Above MFMT you're overfishing; to the left of MSST you're overfished. Depending on how the council wants to rebuild the stock, assuming it's overfished, it may choose to implement a control line that's different than the MFMT to allow a little faster rebuild. The area that you really want to be in is this blue area here to the right of the MSST and below the MFMT.

Here are the results from the runs that we did with different configurations of the model. The base run – that's this box in red here – that's basically in that nice area you want to be in on this control rule. We have the same base run with different steepness size shown here with the same legend symbols. You can see the effect on the assumed stock/recruitment relationship on the benchmarks that are generated.

We used two different ways of determining the age structure for the model inputs. One was using age-length keys based on the size frequency information that was measured each year. We also had otoliths for a smaller subset of those measurements. Those were the direct aging part of it, the A in the legend here. You can see when you fed the model more information you tended to be over into the better area on this plot versus the direct aging which had a little less information to work with.

We also used two different values for natural mortality. We used basically the Lorenzen Age-Adjusted Mortality Values for different aged fish, and that was based on the maximum age using Hoenig's equation. We also used a natural mortality of 0.08, which would correspond to about a 56-year-old fish, which, of course, hasn't been observed yet. That was just basically to give some idea of how natural mortality may affect where you would compute the benchmarks.

The lower natural mortality values tended to put us into the left of MSST. The observed maximum age fish, using the natural mortality calculations, tended to put us over here into this area on the plot. We also had runs with various indexes in or out. We tried an increasing catchability run. There were different model configurations, and you can basically follow a particular configuration by its plot symbol.

In conclusion, we had fish with observed ages out to 40 years old. The fishing mortality rates we computed from the model were not overfishing that mutton snapper stock in 2006. The spawning stock biomass from the base run was increasing and above the benchmarks. Mutton snapper were not considered overfished in 2006. The review panel addressed uncertainty in this assessment by recommending that we revisit the assessment in three years. Any questions?

Ms. Belcher: Thanks, Joe. Do we have any questions for Joe from the committee? Thanks again, Okay, so, again, the task to the group is what is your pleasure relative to endorsement of this document as best available science?

Dr. Barbieri: A motion to accept the SEDAR 15 as the best available science for mutton snapper.

Ms. Belcher: I think we need to have it specific – oh, you probably just said that – to mutton snapper.

Dr. Barbieri: Yes, I did.

Ms. Belcher: Do I have a second?

Dr. Cooper: Second.

Ms. Belcher: We have a second. Is there any further comment of discussion? Okay, seeing none, I'll put to a vote. All those in favor accepting the mutton snapper stock assessment as best available science, please raise your hand; all those opposed raise your hand. The motion carries. I'm going to go ahead and suggest that we break for an hour for lunch. Marcel.

Dr. Reichert: I have a quick remark relative to the SEDAR schedule. Yesterday it was asked to get some information on the red grouper. We had the data available and we can make the data available on the life history part except for fecundity. There is some literature information available on fecundity, but it's unlikely that we can produce sufficient data to give an update on the fecundity. It's just an update on some information that was requested yesterday.

Ms. Belcher: Thanks. So, again, we'll go ahead and break for an hour for lunch. If we can come back no later than 1:30, and we'll get Gregg to give his presentation on Amendment 18.

The Scientific and Statistical Committee of the South Atlantic Fishery Management Council reconvened in the Normandy Room of the Renaissance Orlando Hotel Airport, Orlando, Florida, Tuesday afternoon, June 10, 2008, and was called to order at 1:40 o'clock p.m. by Chairman Carolyn Belcher.

Ms. Belcher: Okay, we're going to get started back now. Gregg has a status update for Snapper Grouper Amendment 18 for us.

Mr. Waugh: Thank you. We have completed the scoping process. You have all of those scoping comments. The council has been waiting for you all to review and take action on the red snapper assessment, which you've done here. We are proposing to them to move red snapper back into Amendment 17; to move greater amberjack and mutton snapper out of Amendment 17 to the Comprehensive ACL Amendment, such that Amendment 17 would focus on overfishing species.

They will be discussing whether or not to go forward at this time with an interim rule to prohibit all harvest and retention of red snapper. The comparison we have is we took similar action with red porgy after an assessment. The red porgy F ratio, when we took an interim rule or it might

have been emergency action back then was 1.09. The F ratio now for red snapper is 12.021. The biomass ration for red porgy was 0.21. The biomass ratio for red snapper is 0.027.

It's certainly going to be my recommendation to them that they do go forward with an interim rule to prohibit all harvest and retention of red snapper. Then we would follow up with looking at a host of alternatives in Amendment 17, but likely given the projection analyses, looking at the impacts of just discard mortality, realistically focusing in on some time area closures where there would be no fishing to eliminate the mortality on red snapper.

That's where we are now. Any guidance you all might be willing to provide in terms of the need for or likely benefits from an interim rule would be probably appreciated. I don't know that you want to do that, but that's where we stand right now.

Ms. Belcher: Thanks, Gregg. Do we have any comments or discussion relative to this topic for Gregg? Luiz.

Dr. Barbieri: Well, it's good that Kyle is here because maybe we can get some additional information on the red snapper assessment results. One of the concerns that I've heard about this proposed interim rule for red snapper is the fact that fishermen keep saying that they are seeing a very high abundance of fish out there or at least their catches are fairly high. Do we have a logical – I've heard a couple of possible explanations for that, but I think it's always good to get some input from the assessment folks on whether they have a feeling for what might be happening there in terms of stock abundance out there.

Mr. Waugh: Luiz, I could tell you what I've been telling them at public hearings. The first scoping meeting we did in Key Largo we just sort of did our standard presentation and here are the results and got a lot of questions exactly like that, not so much that they were seeing them in the Keys but in other areas. I went back and looked at the assessment, and the assessment does show an uptick in biomass.

If you look at the age composition and the recruitment, we've got two year classes above average recruitment. If you look at the growth rates, those are showing up in the fishery now, so I put together several slides with that, and that's in the material you have on our presentation. At each subsequent scoping meeting I presented that information, and that really helped them understand to see that the assessment is supporting what they're seeing.

They're seeing more abundance than they've seen in recent years, but the problem is it's two year classes, and we've gone now – you can look at that recruitment figure and see five or six years with no large year classes again; and what is going to happen is they're going to crop off those two year classes. That addressed some of their concerns. They still express disagreement with the overall picture, but at least they weren't focusing in on that particular aspect.

Dr. Buckel: I wanted to find out was that mainly Florida fishermen, Luiz, that you were talking about?

Dr. Barbieri: Yes, mainly Florida fishermen. We had discussed this possibility of strong year classes coming from the late nineties that are now showing up in the fishery as possibility, but I just thought whatever you guys could add it really makes it easier for us to really explain what is going on in this alignment or their perception of what is going on out there and the results of the assessment, so that's exactly what I was looking for.

Dr. Buckel: I'd like to get Gregg's comments on what he heard from North Carolina fishermen at the public scoping meeting. I have a small sample size of headboat captains that I've talked with, and they said – when they heard about the red snapper assessment, they said this should have been done ten years ago, I support a moratorium, I'd like my kids to be able to catch some of these like I did when I was kid and they're gone. There are just few spots you can get them, so they had the opposite view of what you were talking about.

Dr. Barbieri: Right, but to that point, you know, the sector – when you talk about the for-hire sector, their response to issues like this is usually different because they see much more of a vested interest in the long-term sustainability of the stock than your average recreational angler, unfortunately.

Dr. Buckel: Right, and that's why I wanted to get Gregg's – I feel at the public scoping he probably got a broader cut of the fishing community.

Mr. Waugh: You do, and if you look at sort of the focus of where people have the greatest disagreement is sort of northeast Florida and Georgia, and that's probably the core of the population now; and as you move either north or south of that, people are seeing a lot less and are more supportive of doing something with red snapper. As you get down into the core area of Georgia and northeast Florida, that's where they're seeing more fish and have seen more fish and haven't seen as dramatic declines as fishermen in other areas have seen.

Dr. Shertzer: I was just going to add a small amount to what Gregg said, which is I had a figure that I didn't show in my talk, which was recent biomass going back 15 years or so, and it's close to a doubling of the standing biomass now versus maybe ten or fifteen years ago. I think that's consistent with what some of the fishermen are seeing and maybe at this restricted part of the range down in north Florida and Georgia.

Ms. Belcher: Any other comments or discussion relative to this item? Okay, seeing none, thanks again, Gregg. We will go ahead and move on to the details of the next meeting.

Dr. Stephens: I have nothing to say other than what you know about. John may have comments and Gregg. Did you have comments on the next meeting, Gregg?

Mr. Waugh: Yes, I would suggest everybody look at this calendar and the week of the 11th. We had some suggestions that maybe the 13th, 14th, 15th, and this would be in Charleston to address your OFL and ABC recommendations starting, say, one o'clock on the 13th and ending at one, two or three on the 15th. That's a Wednesday, Thursday, Friday.

Mr. Carmichael: Would the AFS starting on the 16th affect anybody? You might want to move that maybe to 12th, 13th, 14th.

Dr. Williams: Should we be concerned about what we will have available for that meeting? I mean, for instance, we've got several requests in for information from the Southeast Fishery Science Center. If they don't follow through on any of that, then is there even a reason to have a meeting in August? I think we need to sort of get the information together first and then possibly think about scheduling a meeting, because I'd hate to schedule a meeting and then be in the same situation we're in right now.

Mr. Waugh: I'd like to get an idea of dates that would work here. I think coming out of our council meeting you will see a list of specific deliverables that the council would want to have for this meeting and a deadline that they would be received by; and if they can't be received by that deadline, then we would cancel the meeting. I would like to go ahead and just get people to pencil in the dates now, but, yes, out of our council meeting there will be a list of deliverables.

We would certainly look for some guidance from you, as John has pointed out, as to what you want to have in preparation for that meeting. We're not talking about stuff being dumped on the table when you get there. We're talking about stuff getting to you at least two weeks ahead of time, if not more.

Mr. Carmichael: Our initial discussions of the meeting were along the lines of talking about the process and not necessarily applying to individual species and that it would sort of be a two-step thing to try and first agree to your rules and what you would like to evaluate and how you would deal with those many stocks that have not been assessed in a quantitative manner. Then as the motions progressed, of course, it became more of, well, we'll revisit what we've done here at this meeting at that meeting.

Potentially maybe you have two things to deal with, and the duration of the meeting will be tied to how much can be done for that second component, which is actually revisiting the species that you have addressed here. Do you think there is still an intention to have some dedicated time just to talk about the general process of ACL, OFL, ABC recommendations, contents, what type of evaluations will be helpful to have the information, and who should go about doing it? I see Carolyn nodded so I think that is sort of where we are.

Ms. Burgess: Wasn't there someone who was working on some proposed ways to calculate uncertainty that was discussed earlier for the whole country?

Mr. Carmichael: I don't know.

Dr. Cooper: LENFEST is currently working with Andy Rosenberg, but all they're doing is going through 144 species to look at vulnerability. I don't believe that they're going to translate that to uncertainty in buffer size. I think they're really just going through and just kind of ranking how susceptible the different fisheries are and help their productivity susceptibility analyses.

Ms. Burgess: I guess I thought there was somebody working on the ABC control rule issues. Someone mentioned it earlier today, so that's why I was saying.

Mr. Waugh: Yes, I think Kyle mentioned something about guidelines being worked on, that the agency is preparing guidelines – a technical guidance document. Kyle is nodding his head so we will attribute that to him. The timeline on that I don't think would meet our timeline for Amendment 17, certainly.

Dr. Stephens: I think Luiz made the point this morning, too, that the national guidelines might not specifically address some of the species in our suite. There was a discussion in the hall with Dr. Crabtree, and he was thinking about asking staff to get together some of the information about, for example, the Pacific Center –

Dr. Neer: Their tier system.

Dr. Stephens: Right, their tier system for control rules based on the amount of data available and to collect some of that information for this August meeting. I think that's probably part of what I'll be doing for you guys.

Dr. Cooper: I'm all in favor of definitely getting together and starting to talk about this sooner rather than later, but if I understand, I mean, when is the council going to need information for that Comprehensive Amendment, because the things that needed to get for us have kind of been done, I think, for the immediate ones. Mid-August is two months away.

I can't speak for anyone else, but there is not a whole lot of time I can dedicate to wrapping my head around this issue in the next two months. I'm just throwing it out there that if this isn't something that we need to be voting on or laying down drafts by the end of the year, then I think it could wait a little bit longer for this. But, again, I don't know when the council is wanting to put together the draft of that Comprehensive ACL and when they're going to start needing some of this. I know I'm not going to have a whole lot more thoughts on this process over the next two months.

Dr. Barbieri: Well, I disagree with you, Andy. I think you will have a lot more thoughts over the next couple of months, and you're going to bring a lot of very valuable input, I think, to this process. We also, in support of Christine's motion – I mean, Madam Chair here is now tasked with giving our presentation to the full council tomorrow, and in that motion we wanted to send a clear message that our decisions from yesterday were really very interim and that we are looking forward to this meeting before their September meeting where we could be proposing some revised ABC and OFL figures.

In one way or the other, I think the council – in the discussion that Andi was referring to in the hallway, I think the council has a good understanding that this is a priority issue, and they're going to do their best to really nudge the Center to produce those figures, but even beyond that point there are a number of other factors and criteria, the examples that Anne mentioned, that I think great discussions are going to get us moving in the right direction.

Dr. Cooper: While I appreciate your faith in me and granted we're not worked around my schedule, but I'm actually unavailable from the 8th through 18th. I apologize for not being here when that motion was being discussed, but, again, don't plan around my world. Given Luiz's faith in my abilities, I thought I would throw that out there.

Dr. Barbieri: And to that point, Andy, we strongly encourage to submit your thoughts between now and then by e-mail to Madam Chair. If you have some thoughts on this, you don't have to be present at that meeting. We would greatly benefit from you being there, but that not being possible I think we can still get some input from you.

Dr. Cooper: I will gladly provide written input assuming I have anything different to say.

Mr. Waugh: The question was when we need your input for the Comprehensive ACL Amendment. We need your preliminary numbers at this December meeting and your final input at your June '09 meeting.

Dr. Cooper: Let me get this straight. You need preliminary numbers for every stock in the South Atlantic by the December meeting, preliminary numbers?

Mr. Waugh: We would plan to shed some of those species into that new ecosystem component, but for the ones remaining that's the schedule we are on. We will be approving a document for public hearing at September of next year.

Dr. Cooper: And just how many stocks does that end up equating to?

Mr. Waugh: We don't have a number now. We're certainly open to recommendations from the SSC on which species should be moved into that new ecosystem category and which ones you think should remain in the FMP and have overfishing and ABC recommendations specified for.

Dr. Cooper: Okay, so not only do we need numbers, but we also need to figure out which ones are ecosystem component species. When is the final rule going to be published from NMFS so this is actually all definitive as to this is how it's going to work, because I think we could probably spend a couple of days just figuring out what the ecosystem component species are, let alone then tacking numbers onto everybody else. Can you just ballpark; are we talking one dozen, two dozen, three dozen, five dozen, round it off to the nearest ten, anything?

Mr. Waugh: If I was the one that was being asked to come up with the overfishing and ABC recommendations, I would go through pretty thoroughly and try and move as many species as I could into that ecosystem component. No, I don't have a number right now, but to me it would be significantly less than the 72 or 73 that are in there now.

Ms. Belcher: Further comments or discussion? What is our general feeling for what is going to happen in August? Actually, we've already said that we would commit to that, didn't we?

Dr. Barbieri: We did and I still think that it will be well worth our time to get together and have that discussion. I think it will be a productive meeting. Maybe we can think about a few pieces of homework that can be handled ahead of time just in terms of developing lists or putting thoughts together on what we should bring to that meeting.

I think it's well worth it even from a life history, population dynamics attributes, you know, looking at species resilience to fishing based on life history characteristics. I think we can start organizing for a tier system to kind of guide our rationale on different levels of uncertainty and risk that we can or cannot take. In my opinion, Madam Chairman, I would strongly suggest that we do move forward and meet in August.

Ms. Belcher: I've got another question relative to that. For what Gregg is suggesting time-wise, is that going to be enough time, do we feel, to address the issue? How much time do we need to discuss it and give it the full – Erik.

Dr. Williams: Let's keep in mind one of the things that our former chairman, Jim Berkson, tried to set forth as to what the role of the SSC is, and I think it is ultimately going to be the role of the SSC in the future, because there are NS-2 guidelines coming out that are going to sort of dictate some of our responsibilities; and that is that we are primarily a review body. We should not be the generator of original work. We shouldn't be doing original work.

We should be reviewing existing work. Now how that plays with establishing an ABC control rule I don't know, but as far as like actually trying to sit down with stock assessments in hand and life history reports and trying to gin up a number, that's going too far, in my mind, as far as what the SSC should be doing and what their responsibilities are.

Ms. Belcher: Well, then, the rhetorical question is who is going to do it, who is going to outline our work and our protocol for this process? If we're not going to take the opportunity to at least look at what is in front of us, as far as what the guidelines have been put out in front of us, and try to come up with something that's even in a generic format; who is going to do it? Somebody somewhere has got to give us direction on how that is going to happen; and if we're not going to do it, who is? Again, it's just a rhetorical question thrown out there for people to think on.

Mr. Waugh: I understand Erik's concern, but I put a lot more time stock in what congress says than what Jim Berkson says. What congress has laid out is that the SSC will provide the council with a overfishing level and an ABC. It didn't say you will review someone else's work and see if that provides it. I mean, whatever you all need to do to provide the overfishing level recommendations and the ABCs, you need to do. That's what congress – congress took that from the councils and gave it to the SSC.

Dr. Williams: And how often did the council actually do that kind of work and do the calculations – never. Frankly, Gregg, you're speaking out of line because I'm on the NS-2 working group and I know where they're headed, and they're headed in the direction of SSCs will be review bodies only, and that's their role. We should not be doing original work.

Now who is going to do; that's a very good question. I mean, it's just another one of the weaknesses in the southeast. We're understaffed, we have poor data, and we're not able to basically play the game that the big boys are playing, the North Pacific Council and New England. What do we do about it? I don't know.

Ms. Belcher: I just find it frustrating because, again, we've heard the conversation relative to the 75 percent of FOY, and it was basically not scientifically fielded or however you want to put the language to that, but at some point shouldn't the SSC have been able to say that? I mean, I just have a difficult time with that.

If it's been a problem for so long and we've never taken the initiative to try to come up with something better and we're waiting for people to tell us how things are going to proceed, but we're still not happy with it; at what point are we going to take the initiative to start putting in line a protocol? I understand the concerns, and I agree with you in terms of the numbers and doing specific analyses and kind of kicking things around and, again, the complaints about back-of-the-envelope exercises, I totally understand that.

But all we're trying to do is what we did yesterday, come up with some framework for those species that have assessments; what are the things that we can put forward; do we use these proxies; do we use MFMT; if OY is not the thing to use, what is the thing to use; do we have other abilities to look at it and at least see what those impacts are going to be?

It's not asking us to do anything new. We're not trying to reinvent an assessment. It's just giving ourselves some framework in absence of any framework now; that at least we can feel comfortable that management can continue; we're comfortable with the uncertainty being accounted for in it and if we feel it's scientific and not ad hoc. I think that's kind of where again I was hoping, and I think that's everybody, that the August meeting was going to be to do that framework.

And, again, we kind of set it up and we're still obviously not happy with the 90 percent and 95 percent we threw in for black and red. That's the kind of stuff that I think we need to sit down and at least come up with something and come up with a defensible reason for it; do we need to go to 50 percent of the landings, those kinds of things?

I mean, everybody was understanding the argument for zero ABC and everybody seemed comfortable with that, and that's obviously highly, highly conservative. In that situation I think that's more of what we should aim for in August is that ability to do that framework. I really don't feel at that point it's original work. It's just, again, trying to give ourselves some foundation that we're not mired in the process and stuff behind the wheels of progress.

I mean, you appreciate full well the frustration everybody felt with waiting for the guidelines. I mean, we heard a year ago guidelines were going to be out last fall and then it was the first of the year and then it was – so it kept getting pushed back and pushed back. And with the technical guidance, I'd love to see the technical guidance come out to at least see how it's going to work

for us, but, again, are we going to fall into that same mode of waiting three months now, then another three months, then another three months?

Meanwhile we're still going to end up backed into that corner, but at least now we might come up with something that's a lot more acceptable to most and then we have to fine tune it later. I just kind of feel like we need to at least try to put that framework up. Erik.

Dr. Williams: And I agree exactly with what you said. Maybe I was mishearing people earlier; it sounded like we were going to be generating some additional ABCs at this August meeting, and I don't think we should be doing that at that point. I agree, what we should lay out is our ideal framework and maybe even a tiered system like was mentioned that is adopted in the North Pacific. Yes, that's exactly what we should be doing in August.

Ms. Lange: I'm not sure if this clarifies or complicates. I was just going through the guidance and it says, "For the purposes of setting ACLs, a critical piece of the scientific advice that councils will need the ABC. Taking this into account and considering new requirements in light of existing SSC, council and peer review processes, NMFS proposes the councils establish a process that could be included in their SOPPs which will establish an ABC control rule, identify the body that will apply the ABC control rule; i.e., calculates the ABC, identify the review process that will verify the resulting ABC and confirm that the SSC recommends the ABC to the council."

I think this kind of goes along with what Erik is saying that the council itself needs to decide what the control rule is going to be or tell us specifically that the SSC needs to come up with recommendations for the control rule.

Dr. Barbieri: And I understand all of that and I agree; that's actually additional information that I guess we're not considering before that is helping us move in the right direction. However, we had an orientation not too long ago. I'm new to the SSC. I need to understand really some clear definition of what the expectations are for what our role is here as an SSC. We're hearing a bit of different things.

Even if these numbers are produced by somebody else, you know, hopefully – SEDAR, yes, you know, ideally – they're going to be producing this ABC as another output that will come up out of these assessments. I wonder, just like we did today for these two stock assessments – with three actually stock assessments that we are asked to review, and the moment that we give it our seal of approval and we say this is the best available science, we're actually advising the council that we accept these assessments as the best available science to reflect the status of the stock, so that the council can feel confident in moving forward with whatever management recommendations necessary based on those assessments.

I don't expect any difference regarding those ABC levels. Again, when we've done this before where we get perhaps an ABC range that comes out of the stock assessments and look at them and we can adjust them a little bit, but we give it our seal of approval, you know, all of these

numbers coming out of the assessments, you know, reflecting really all the factors that we want to incorporate in our judgment to accept them or not; I doubt it.

I mean, I think that as a group we will still be asked to review and approve or recommend modifications to those numbers that come out of the assessments. And, by the way, those numbers will come out only for the stocks that are being assessed. Considering the number of stocks that we're going to have to provide recommendations for, that's a different story. We're not going to get numbers for everything out of the assessments.

So, I'm trying to understand here, really, what the role of the SSC is in really making an ABC and OFL recommendation to the council and how much we're going to have to interpret and approve those things, what criteria we're going to use, and is this worth discussing in August? And you know more than all of us here, Erik, as you have been involved in that process, so help us.

Dr. Williams: And this is where we're revealing a lot of problems in the southeast. I mean, we are in a situation where we have targeted stocks that have been targeted for years, on the order of decades, that haven't had an updated assessment. We're so behind on assessments. We have a lot of stocks, there is sufficient data to do an assessment, we just haven't done them.

What the SSC is going to be faced with is a situation where we know we have enough data to do a much better analysis, but we're going to be asked to pull a number out of thin air, almost, for a stock for which we could do an – or somebody could do an analysis on to get us better information that might be scientifically defensible. This is where I keep harping on it's our scientific creditability.

We're going to be asked to push the limit of what we consider best available science in this situation. There is no doubt about it, and we've got to be careful about what we're blessing as best available science and what we're not because on a fine line here, and that's where a lot of my concerns from. I mean, I can list at least a dozen stocks right now that I know, I know for a fact that we have enough data to at least do a per-recruit analysis, but who is going to do it? A per-recruit analysis would get us a long way away from picking some average catch reduction as far as scientific defensibility.

Ms. Belcher: But isn't some of what we could then, as we're trying to come up with this protocol in those situations, just like we did with red and gag as a suggestion; can't we have that ability to tell them that in SEDAR process here is what you've got scheduled, but we're telling you, based on what you're putting on us as far as pressure to meet the guidelines of Magnuson, X, Y and Z, we're telling you that this ordering needs to be readdressed?

I mean, can't we do something like that? Is that not an alternative? I understand the issue, but again I think it's offering us something else in lieu of we're not going to do it, we can't do it. We're telling you that there is availability out there, and you're not putting us in a position where we can do it, and this is what we need to do that.

Dr. Williams: Yes, we can ask to reorder a few things, but I think the problem is bigger than just that. I mean, there is literally about – I mentioned a dozen. I've been asked several times to look at this problem from the Southeast Center's perspective. I would say there are probably as many as 20 species for which we could do some level of stock assessment for that are not on the SEDAR schedule. There is no room for it on the SEDAR schedule between now and 2011. What do we do with those species? Clearly, they can't fall into that ecosystem component category because we could do a stock assessment, and they are targeted to some degree.

Dr. Barbieri: Well, my point is that I think that, again, the August meeting would be beneficial because then we can start this discussion as a group about how we're going to handle those things in this interim period until we can get the assessments lined up for some of those species. We can actually make recommendations like we did yesterday to change the SEDAR schedule to address some of the species for which we need assessments.

Another point that I think we need to think about is do we really expect, with all due respect to the council, but do we really expect that a council will provide us with an ABC control rule that's based on the scientific criteria that we consider minimal for us to adopt? Are we expecting that input from the council or are they going to, yes, instead ask us, okay, you guys go ahead, here are some loose parameters and you guys go ahead and develop the control rule yourself and give us some feedback for what are the scientific justifications for some of these decisions?

Dr. Buckel: Eric, I wonder if it's worthwhile for us to go through, for example, those 20 species or list what are the options that we have, and then the SSC could choose from that list and put several recommendations forward. I guess that the highest level would be we're asking for assessments on those species. At the lowest is not taking any action, which basically I think we were just one above that yesterday with red grouper and black grouper.

If we didn't take any action, then it just stays status quo, and there is a chance that a bunch of gag fishermen moved to red grouper and the red grouper landings go through the roof. Well, what we did yesterday would at least prevent that from happening. It keeps it level or slightly below what the landings were over the last five years. Maybe just listing some of those different options, and then we could choose from those to put forward as a recommendation from the SSC.

Dr. Barbieri: Just one comment also is I wonder if I were a council member, you know, reading the language that will come out in the guidelines and that will be interpreted differently by different people, but how to interpret that language – if their interpretation of the council develops an ABC control rule means the South Atlantic Council as a body – and that means they can actually delegate that to the SSC or they can say, "Okay, we'll make the final decision as soon as we receive from you a complete set of recommendations and criteria for how we're going to do it."

You know, so they basically delegate that task to us and they give it final approval, and that means that the council itself approved the ABC control – developed the ABC control rule. So, I'm not sure we're off the hook in terms of developing those things.

Dr. Cooper: Two points – the first, in this talk about reordering SEDAR and stuff like that, keep in mind setting an ACL may not be our top priority in determining what stocks we assess. Just because we have to set an ACL doesn't necessarily make that a top priority assessment. What we should be doing when we start talking about reordering SEDAR is figuring out what stocks we think really need assessments, which ones do we think might be in trouble and continue to be in trouble, and focus more on that.

And even if it has been assessed already within the past five years, if we think this thing is going in the tank, just because we want an ACL on some other thing may not bump that up to the top. So when we start thinking about reordering what species are being assessed, let's keep in mind that there are multiple objectives when we're assessing stocks.

The other thing that we also haven't mentioned that I think we used to mention a lot – and this probably won't be a very popular suggestion for some people in the room, but there is a thing called "council staff". You know, when coming up with recommendations for changes in quota and recreational fishing things; that it was the council staff, if I'm remembering way back when, that actually did the analysis to figure out what the options were.

I think what would be helpful, especially since it's the council that is wanting us to move so quickly, to dedicate some council staff to put together some white papers, so when we're coming up in August, we already have a bunch a options in front of us and not necessarily relying on us, in our spare time, to come up with all these things. But I think if this is a top priority for the council, well then we're going to need some help, and I think getting council staff to put together some option papers and things like that, I think that would be a reasonable request.

Dr. Williams: I think we can go further than that. The language in the NS-1 guidelines says that each council should establish an ABC control rule based on scientific advice from its SSC. The process of establishing an ABC control rule could also involve science advisors or the peer review process established under the Magnuson-Stevens Act.

The peer review process that I think they're referring to there is our SEDAR process. I'm wondering if, for this August meeting, we should also possibly identify some external science advisors to come in as well and maybe then even ultimately run our ABC control rule through the SEDAR process for review.

Mr. Carmichael: It's to a couple of the previous points. You got a lot of options papers and white papers presented to you. You typically reject what the council staff has provided for you. You had options for ACLs, OFLs, ABCs, what have you, all laid out for you. You've rejected them. Council staff explicitly asked – I'm a broken record on this – last December what analyses would you like us to provide to you to do your work on ACL and ABC, and you gave nothing.

So until the committee starts to provide specific guidance, we're going to be in this endless do-loop where we try to put a little something out there, you reject everything we give you, and say, "Oh, we don't have enough analyses", and we keep going around and around. We have been

doing this on this OFL business for a long time. You don't have guidance from on high for how much risk you may allow for overfishing, so we don't get anywhere.

You don't give guidance to the council staff as to how you would like your ABC control rule perhaps created. You have the assessments, you have all the documents, you have everything we have. Council staff can't do many of these analyses. Council staff has seldom done evaluations of options and stuff like that at this council. In fact this council attempted to hire someone under the title of "stock assessment scientist" and soundly spanked for that and told "you will not hire somebody at that because that's not your role".

Council staff increasingly is put into less of an analytical role in this process, and your analytical body is the analytical body of the council, the Southeast Fishery Science Center. If you have specific analytical requests, then they need to be elevated up as a request and the council will try to get them done, and then there is a whole workload issue that goes on in everything of that nature.

But I think the first step is if you have specific things you want analyzed and if you're going to draw a real strict line about what is original work, then the committee has to be pretty explicit in what you want to see or else we're going to be sort of in this endless thing where somebody does something, well, we don't quite like that, you know, do it this way; okay, well, that's a little bit better but do a little different.

And when you meet twice a year, you know, suddenly the time lag becomes decadal before we actually make any progress, so I think at some point the committee has to have this procedural meeting and think about what it is you really want done and what sort of guidelines you would like. You know, it's just like when the council has a request for a series of alternatives for management, they'll say, "Well, we want you to find an alternative that's based on a season that does this or does that."

It's kind of a clear directive that they want to look at these alternatives, and I think you're going to have to get sort of to that level of detail in the requests that you make so that we can actually make some progress; because, between the regional office and the science center and the council staff we'll try to put anything before you we can.

But, you have to state what you want, and right now my experience is that we're kind of in this loop of you tend to reject everything that's put before you that council staff or the regional office – the list of, you know, FOY yields for ABC consideration, you have rejected all that. You've got the assessments; you didn't bother to look at the assessments. You didn't tell us you wanted to see ranges on any of the values from the assessments. We haven't had a lot of guidance, so it's going to be hard until we get that.

Dr. Williams: To that point, come on, John, we've heard enough of you whining about us not doing our work; we have a good reason for not doing it. We haven't had any guidance what so ever. In fact, as Andy pointed out, you were asking for ACLs at one point and now you're

asking for ABCs. Let's move beyond that. We finally do have the guidelines and now we are trying to move on it.

I mean, I think we're getting a sense that we're being asked to do more than – I mean, get way ahead of the process. I agree, I think all we need to do at this August meeting is establish our ABC control rule or a proposal for that, because actually the way this language reads it's not us that ultimately decides it, it is the council with our advice and other scientific advisors. I would ask council staff what is the possibility of inviting a couple scientists to this meeting and paying for their travel?

Mr. Waugh: I can approach Bob about that. He said we have enough money to pull the SSC together, so it's a possibility.

Ms. Lange: Well, I think basically what I was going to say was pretty well covered by Erik. I mean, the guidance says that the council will establish a process as part of its SOPPs. That's not to say that process for developing the ABCs isn't the SSC. I think it would be nice if the council would make that clear and just task the SSC to develop a recommendation for the ABC control rules, and then it's clear. Then there is no question that it has been assigned to us or relegated to us.

Ms. Belcher: I want to kind of get this back to that thing about the disappointment with 75 percent of OY as well. Obviously, that didn't come through the SSC. At that standpoint, if we're doing that, we have no reason to complain about the control rule later.

Dr. Pollock: I just wondered about this meeting in August. I mean, there is no way I can come to that. It's so soon. The other thing I wondered about is a general point. I counted it up and there are 16 people or something on this committee and 9 people are new this year. You know, sometimes some of the comments like about you did this and that are not all that helpful because we weren't even here then.

It wasn't even made clear to us exactly what we were signing for. Now you're telling us we may have all these additional meetings and things. There needs to be some kind of understanding about the role the new people here are in. I mean, we're sort of trying to figure out what in hell is going on, and there is a small group of people that's talking back and forth.

I mean, I think you ought to stop and think a little more broadly about where we're going and do people really want to commit to being on a committee like this where it's not even clear what we're committing to. When I signed on people didn't say, "Well, you could have an extra two or three meetings a year." That wasn't told to me. I don't have the time for that. I thought that I would be a person to do reviews. That's what I thought my role was. When Erik said that I thought, "Yes, that's what I thought I'd be doing."

I thought I'd be looking at SEDARs and trying to see what the weakness is in, and I can see a lot of weaknesses in a lot of these things we're talking about, but we're not discussing those in any sort of way that's logical. We don't get in and say well, look, there is a problem with discard

mortality; we need better data or there is a problem with something else we need better data on or there is a problem with we ought to learn more about the models or something. We're getting bogged down in these things. We just seem to be going in a circle at the moment.

Mr. Carmichael: Point taken on that; definitely, a lot of people are very new and aren't privy to this. I think the ultimate goal of the council is that this committee can be reviewed, can meet twice a year. We don't want you to meet more than that. We understand the time demands. We're trying to work on a process of getting some technical committees which would report to you, which would be the groups that will do more of the original work and submit things up through you.

We're just kind of bogging down now in trying to get that done, and a lot of that is because of the new information thrown at us. I think we do want you to review at a higher level and to discuss those kinds of details. We're just struggling in figuring how to get there.

Dr. Pollock: I just wanted to say one more thing. I think when we have these meetings we ought to have a block of time each time devoted to a topic that really needs addressing and not a topic about one particular fishery but a general topic, because then we could actually say, okay, we'll have half a day of our meeting that's going to be devoted to some topic and pick out which are the most important ones.

They could be more general things like about setting these ABCs or it could be something about data deficiencies or it could be something about model deficiencies; and out of those could come recommendations. We really need help to improve these things. We haven't talked about the MRFSS as much, but some of the numbers we saw yesterday were just ridiculous. We saw numbers like 80,000 one year and zero the next year.

It's because there are only about five interviews in there. Maybe it's all been said before, but we should be making general recommendations about all of those sorts of deficiencies and not just focusing on one particular fishery here or there. We have to do that as well, but we should be heading things up the line about making recommendations on things like that, so that five years from now things are better than they are now. That's what I was trying to get at.

Mr. Carmichael: You know, one of the things that's been talked about with regards to the targets and the accountability measures is how do you deal with that type of variability in the data when you set the accountability measures, and that's a good point to talk about that before it gets bogged down in the specifics of an individual fish and where you go. Is there a rule for dealing with that kind of stuff?

Can you meet longer? We don't want to meet more often. If you dispense with the general business a couple of days and then spend an extra day, half a day or something talking about some sort of general interest topic that reaches across the board that defuses a lot of these long conversations about the specifics that you have to have over and over again with every species, I think we can accommodate additional meeting time without too much trouble, anything that avoids the extra meetings.

Ms. Belcher: Okay, and now, unfortunately, to pull the reins in, what are we going to do about the August meeting? Andy.

Dr. Cooper: To that point, we had I think it ended up being a two-day workshop on setting ACLs in Beaufort that we tried to figure something out. At that LENFEST Group there were some pretty smart people that I found it rather intimidating. They didn't know of a method to see ABCs or even ACLs for data-poor species. Alec McCall came up with this approach. It's not published.

There are much greater minds out there than mine, and no one has published anything on this. Keep this in mind when we are saying, oh, we're going to meet in August and we're going to figure out a way to set ABCs. There are a lot of smart people out there figuring out who is going to do that. I know I certainly don't want to say, yes, sure, I'll be able to do that, because, you know, it hasn't been done yet; and in two months to come up with an approach for – if we have an assessment, great, but we're going to need a tiered approach.

I mean, one of the things that the LENFEST Report tried to emphasize is, you know, for these stocks that we know a lot about, that's probably the least concern we should have for setting ACLs. What we really need ACLs for are the ones we don't know anything about; and, guess what, we also don't have the methods to do that yet. In August I bet we can come up an approach for ABCs for the ones that are assessed, and they'll probably be pretty rigorous.

But guess what, the ones that are really important are these data-poor ones. It could be the hardest task and in scheduling this meeting we should make sure the budget is probably the most amount of time for that. As we have seen in this meeting, we can spend a whole lot of time talking about some issues, but make sure we're hitting the important ones because that's the stuff that hasn't been developed yet, and I sure as heck don't know of any methods off the top of my head outside the one Alec put together.

Mr. Gregory: I think we ought to just ask who can attend the August meeting before we go too much further in planning the August meeting. I, for one, cannot attend. Ken said he couldn't. I think Marcel said he couldn't. Maybe there are enough of us that can't make that week to where we should pick a different date.

Ms. Belcher: Then I'm confused why we put forward a motion that said we were going to do that? I mean, everybody agreed to that and now we're saying we're going to go ahead and back peddle and see how many people can go; and if nobody can go, then we're not going to do it.

Mr. Gregory: I didn't know we had a motion. I thought Gregg said that's the only week that is available and we just kind of accepted it. Okay, I missed that.

Ms. Belcher: Christine put a motion up on the board and we voted on it.

Dr. Barbieri: Well, first, Andy, I think those are excellent points, and I think that they connect very well with the points that Ken made. I think the thing to keep in mind here is what we have

to do as a job, as a member of the SSC, the expectation of the council for what we signed up for in providing them with either this ABC rule or approval and ABC figures or whatever other criteria one can incorporate.

I would love to wait another two years and spend the next three years really first waiting for some of the better minds to produce some – you know, it's always good to be first to go second and let somebody make the first attempt and some mistakes and we can learn from those and we can go then. I don't think – I mean, when I came for orientation, I was given a clear message that was not an option.

The expectation of the council was that we produce something by the end of this year, really, so we're trying to address that. No, it's not going to be perfect and actually it's bound to be very imperfect. We just started this week with a very rough, imperfect, you know, but it's a starting point. And to Ken's point, yes, we should be dedicating a chunk in the budget, a chunk of our meeting time, in the scheduled meetings, to actually revisit that issue.

We can refine – I mean, we can learn from experience from what happens. This will be sort of an adaptive management kind of sort of approach in a way as years go by and we get to see what is working and what isn't. Now to the issue that Mr. Gregory brought up, well, maybe August is not a good time. None of us were counting on an additional meeting.

To tell the truth, I don't want to do it either, but the bottom line is if we don't meet in August or some time before our December meeting to have this discussion, are we going to be able to move forward in the December or are we going to be complaining we haven't had the time to discuss these issues, we haven't even had a block of time. In December we're going to be given a full agenda again with all sorts of issues we're going to have to visit and evaluating the review for the council.

So, this is an attempt to say we may need some dedicated time to look into the – it's that important that we look at this issue very carefully with dedicated time; and if it doesn't work for the group in terms of timing, I think we should reschedule because we're going to need a lot of people's input for this to be successful. And even going beyond what our SSC is what Erik is suggesting, and I agree, that we can have some invited people, other experts to come and help us through this process, because we're going to need help.

Ms. Belcher: Further comments? Again, we need to make a decision on what we want to try to do with the August thing. I apologize for being out of the conversation so if I'm interjecting something again, I'm just trying to get us back on track because with every minute that we focus away from finishing this agenda, we can't get the report done, and you're going to see me jump off the highest point of the building if I don't have something from this group for tomorrow.

Dr. Pollock: I just wanted to make one comment about the data-poor stocks. It's a pretty obvious comment, but it seemed like our discussion yesterday was just incredibly ad hoc; that you take the average landings over the last five years and then you take some percentage of that. I mean that doesn't seem to be based on science to me.

It's just ad hoc, and so what are going to discuss around that unless we come up – like Andy said, well, there may be some way to come up with some new way of doing it, but if we don't have that, and we won't by August, then what are we going to be talking about. We might talk a little bit about life history, as you mentioned, but aside from that are we just going to come up with some ad hoc rule that will be the average over the last five years or half the average over the last five years, and how would you decide which one?

If you want to be really conservative, why don't you make the ABC half the average over the last five years' landings or a quarter? I mean, it's totally arbitrary. I don't see any science in there anywhere. It's just some arbitrary thing because we have to make something, and I don't see what will be different in August to now about that. I don't see us being – unless you're going to bring in some other kind of data that I'm not hearing. I'm not an expert in this area, but it just seems to me it's going to be really arbitrary and maybe not all that fruitful. I'm just confused about that.

Dr. Barbieri: And to that point, Ken, I agree with your main points, but I think we should be separating what we consider arbitrary decisions from making a professional judgment. All of us have to make decisions that involve some level of using our best professional judgment to make a decision that's somewhat qualitative and is not based on some numerical outcome or not based on some probability function, and we still have to make those decisions.

I mean, all of us have to deal with parameter choices. There are all sorts of biological issues that actually involve us using what we have learned about fish biology to make a recommendation on what we believe is sensible. I think that's different than arbitrary. I think that we are going to start with less information. We're going to start from a very rough beginning point, and we're going to see what we're going to get at the end of that meeting.

Risk analysis is one type of approach that we can use. There are other examples. There is some draft work that has been done that we can use as models to make some decisions, and, yes, we're going to have to make some qualitative recommendations; yes, we're going to have to – you know, it's no different than medical doctors, for example, making calls and interpreting a histology slide or interpreting an MRI or something of that nature, and that doesn't mean that's not scientifically based.

We are using unconsciously some decision-making process to make a choice and make a recommendation based on our best professional judgment. To say that's arbitrary, to me this considers our level of expertise collectively as a body to make a recommendation to the council.

Dr. Williams: Yes, so it's not arbitrary but it's certainly not scientific, and there is a clear distinction. I mean, we are a science body. There are standards of science that we can abide by. There are standards of what is scientifically defensible; and just simply making a decision, even if it based on professional judgment, is not scientific. It's not going to stand the test of science scrutiny when somebody says is this best available science. I mean what if it went before some

other independent review body; do you really think they're going to accept what we just put forth for ABC levels for those assessed species? No.

Ms. Belcher: But we put forth sound science before that's still gotten kicked out as not being sound science. I mean, to me to say one thing is any more powerful than the other – I mean, again, I'm not dissing what you're saying. It's just when I think about the situation that, again, what you're saying is you have collective expertise. Yes, we may not have it in the form of a published paper or whatever, but, again, we defaulted to a couple of points yesterday that we agreed with your observations, we trust the fact that you've done that; is that any less valid?

Dr. Williams: You just reiterated my point that the bar of best available science is actually raised in this atmosphere; that it's actually above what probably is the standard elsewhere because we are held to a different standard in this overall process, the council process, and what the SSC approves as best available science. I mean, it falls under legal scrutiny after we get passed; and if the council can't say or some other independent review body can't say this is best available science, then the legal system actually kicks in oftentimes.

You just reiterated my point even further that the bar for what is best available science and what is scientifically defensible for us is actually even slightly above what is probably the standard elsewhere in the country.

Ms. Belcher: But the reason I had said that was the fact that we're trying to get our foot in the door. We're trying to get our starting point. Logic should carry through some of this, too. I mean, people have won court cases just based on some standard forms of common sense. I mean, it doesn't require that there is some body of evidence behind it. It's just a matter of the logistics that go behind your argument.

Again, if the foundation is shaky, obviously you're pretty much shot, but if we build a record – and that's where, again, getting back to documentation for 17, if you're building a record as solidly as possible, it's just a matter of you're going to throw rocks back and forth at each other as to who has got the more valid argument. Again, I'm recognizing it and I know what I said.

It's just that I'm saying that we're trying – rather than not putting a best foot forward at all, I think we need to try to use what information we have available to us to at least start putting some sort of rudimentary framework together.

Dr. Williams: Right, and how can you possibly say that what we did for black grouper and red grouper has any science behind it whatsoever? I mean, yes, a number is generated but –

Ms. Belcher: And that's exactly why I was suggesting going back and revisiting this and why we're trying to put this timeline in to make for September, so that we put the recommendations forward. We gave the option to pull the recommendations off and no one was in support of that. We're wanting to put together a framework. We're trying to work within. We're recognizing our deficiencies, but we're trying to put the effort forward to correct for that.

Ms. Lange: It's supposed to be based on best available science. If we don't have analyses, we do have landings data. We can calculate average and average is science. It's mathematics on a statistic – I mean, it's what is available. Even the guidelines say that average catches may be the best that's available. Certainly, we should encourage getting additional data and analyses and surveys and whatever other indices are available or could become available.

But, to sit and say we can't give any advice I think is irresponsible on our part. If there are things at a bare minimum of history of landings and in the best expert opinions or the best expertise that we have on this committee, if there is information relative to life history, if we've got a 10-year or a 50-year time series of landings data and we know that it's a vulnerable stock based on who here has experience on that particular species, then we have to do something. It's better us than the managers just not doing anything.

Dr. Crosson: I find myself in agreement with Anne on that. I think it's not just science; it's also a statistical committee, which is mathematics of dealing with uncertainty and probability; and if you can't mitigate the uncertainty, then it's in our interest or actually we are required to express that uncertainty and say these are the numbers. The best we have are some descriptive statistics based on catch, landings history or really bad MRFSS sampling or the life history of these species.

These are the numbers we have. They're really basic but this is the best number we can come up with, but, look, because of all of the uncertainty that goes into these descriptive statistics, because we don't have anymore complex models than this, we have to have these caveats to go along with it. Again, we all have a statistical background and not just a marine biology or economics background. I thought this morning we did a good job of writing something to that effect to help with what you have to present tomorrow.

Dr. Barbieri: Erik, I think, again to cross that bridge, in making that decision, you know, shall we actually move forward with providing these ABC recommendations or working towards development of an ABC control rule, I think that you know that none of us here completely disagree with you.

Obviously, you're bringing up some excellent points; and if we didn't share your concerns, we would have all these issues resolved by the end of the day yesterday and wouldn't be so far behind in the agenda. We have the same concerns, but how do you reconcile – Erik, how do you reconcile our function? I mean, what is your recommendation?

I mean, you sit on the panel, the national panel that is developing the guidelines. From what I hear there is already a draft out for the full set of guidelines. You're participating in those meetings. You're talking about the burden of the legal issues that we're going to have to deal – what is your recommendation then for how we should proceed?

Dr. Williams: I haven't disagreed with us heading in the right direction of having a workgroup or an extra meeting or whatever form it takes to establish an ABC control rule for various levels of information. I guess my concern is what we just did here already at this meeting we sort of set

a precedent already for a control rule for species for which we have no stock assessment and all we have is landings. That doesn't sit well.

My fear is we're getting caught up in the council's, quote, need for these boxes to be filled in. They have clearly at the orientation meeting, which I wasn't at, impressed on quite a few folks that, oh, we absolutely must fill those boxes in or something bad is going to happen. I disagree with that wholeheartedly. We don't have to do that if, and especially if, what we're being asked for has no scientific merit whatsoever. It's just computing the average of some time series.

We can do that for any time series. It doesn't make it scientific. It doesn't even make it statistical in the sense what we're being asked for, because what we're being asked for from the guidelines is an OFL level, what is the overfishing level and then an adjustment to that for scientific uncertainty.

We've got to be careful about where we draw the line on what we can do and what we can't do. There is going to be a point at which we just simply cannot fill that box in, and I hope everybody realizes that is the case. I hope nobody here thinks that, oh, we can fill in every box in every situation.

Dr. Barbieri: And to that point – and I agree, but I think that as a body, even, I think our message for the council about the boxes that we will not be able to fill – and I agree with you, we're not going to be able to fill all of those – we need to make an actual recommendation to them and say as a body we agree that this, this, this and this box we will not fill. We will fill this one, and the amount of confidence that we had in these recommendations – I mean, we have an obligation to actual fulfill that role to them.

Another issue is the timeline, the expectation for when we're going to have this information ready to make a recommendation to the council. Well, are we going to have it by December of '08; are we going to have it by July of '09; are we going to have it by 2010? How long would it take for us to be able to have all the criteria carefully assessed, one; and, two, have all the data and all the analyses ready?

If we have an idea of that, at least we can give the council, listen, at this point we're not ready to make a final recommendation, we're not ready to fill these boxes, but we'll tell you that by the end of 2010 we'll have this done or that we expect to have it done. I mean, I think that some of our effort here is an effort to be responsive to what the council has asked us to do within a reasonable timeframe.

Ms. Belcher: Okay, Christine, Andy, Doug, and then we truncate there because we need to make the decisions on what we're doing relative to the upcoming meeting. Kyle has asked to come forward and just give a little bit of background information relative to the technical guidance that is due to come out.

Dr. Shertzer: Just in case it helps you to form your decisions here, I thought I'd let you know what NMFS is up to. I'm on the NS-1 working group which is tasked with developing technical

guidance for coming up with ABC control rules, ACLs and ACTs. Content-wise what I expect to come out of this is that there will be a section on data-rich species, and one of the possible approaches will be that probability, the P-star approach, and there will be others.

There will also be a section on data-poor approaches with the McCall Approach and maybe some others. I expect to be working with Alec on at least getting some South Atlantic examples into the data-poor section. It will not be a set of recipes for coming up with ABCs, but it will be some examples and possible control rules that could be used.

It sounds like your group now is considering doing something in parallel, doing something similar and coming up with control rules for ABCs, so I thought it might be useful to know what that group is up to. The timelines that they're working on is having a draft of the technical guidance written by next month, a first draft, and having it finalized probably by the beginning of 2009. Of course, it can't be finalized until the proposed guidelines are finalized, which will be three months or so from now or longer.

It seems like it potentially would be a better use of your time to review what that group does, potentially adopt what that group does, if it meets your timeline. Maybe it does if the ABCs don't need to be in place or proposed until the June or July meeting in 2009. That's up to you guys. That's all I wanted to say.

Ms. Burgess: Yesterday we were given an hour to come up with stuff, and we came up with some numbers and then later on we passed a motion saying that wasn't really best available science, but there is other information out there that we could be looking at to help come up with better estimates. We just don't have the time, basically, right now to be able to do that. That's why another motion passed to revisit these species that we just kind of filled in the boxes with numbers at this meeting just to satisfy the council.

It didn't satisfy us so that's why we wanted to have another meeting and look at some of the life history parameters for some of these species, especially the ones where we don't have any stock assessments on, to come up with some better estimates for the ABC; and for those species that do have stock assessments, to revisit those stock assessments and look at it species by species in a little more detail to see how much faith we have in the point estimates of those stock assessments to see what the level of uncertainty is in those point estimates so that we can better come up with an ABC that maybe needs to be more of a buffer zone or less of a buffer zone.

In the December meeting we have to come up with more estimates for like 30 species or something that we don't really know how many it is, but it's going to be a lot, so we've got to come up with some method by then. We don't have enough time, unfortunately, to wait for the report that Kyle's group is working on to come out, so we've got to come up with something. I don't want to come to the December meeting and have this exact same conversation again, to where we're forced again to come up with some proposed estimates.

I understand Eric's concern. I am with you on it, but, unfortunately, if we don't give recommendations somebody else is going to. I've talked with people already and they say that

the council is going to have to come up with ACLs whether or not we have OFLs or not; and if the council doesn't, then the Secretary is going to have to. And if that doesn't happen, they could shut down fishing, and that's going to put people out of business.

Somebody is going to have to come up with some kind of numbers around here. I just don't want to come back in December and be in the same spot, so I'm all for meeting. If it's not in August, let's meet in September, November, whatever. Let's meet before December so we're not in the same spot again.

Dr. Cooper: Erik, I agree with 90 percent of what you're saying. The problem is for data-poor species all we have is a catch stream. They're going to be subjective decisions based on science we're going to have to. This depletion method that McCall is doing, guess what it requires, an estimate of how depleted the stock is; and if all we have is landings, that's going to be us sitting around and saying is it 70 percent depleted, 60 percent depleted, 62 percent depleted?

It's a quantitative method, but guess what, you need a number in that box to turn the crank to get the estimate of what the overfishing – how much of that catch was sustainable catch? We are going to have to get used to making subjective decisions based on best available science because we're not going to have stock assessments for all these species, ever, and I doubt we are going to be able to just go through and of the 72 stocks we have listed, put a whole bunch of them as ecosystem components.

I'm estimating we're going to have to come up with a heck of a lot of numbers; and lack of information, unfortunately, is not an excuse for not putting a number in the box. My understanding of the reauthorization is you need an OFL no matter what you've got for information; and if it's just a catch stream, guess what, we're going to have to a way of doing it. I doubt we're going to be able to find a purely statistical objective way of doing it.

And, yes, come December, given what we've been through here, okay, we did that for ten stocks that for a number of them we had this bunch of information; we're going to have to do that fivefold. And guess what, most of them are going to be the ones that we rushed through with a very ad hoc method that we didn't really put a whole of time or effort in thinking if that was actually representative of OFL.

It's going to be a long meeting in December. If we can meet beforehand, great, but, yes, we're doing it in parallel with what NMFS is doing. We may come up with stuff that NMFS' technical guidance says, guess what, that's a bunch of hooey, and we may turn around a year later, after people have run more analyses, and say, "Oh, man, we were way off."

But, unfortunately, what we're guiding is not objectively best science. Our guidance is best available science; and if all we have is the catch stream and we need to figure out what the overfishing level is, we're going to have to come up with a way of doing it, and it's not going to be based on purely crunching numbers.

Mr. Gregory: What we've dealt with this week were species that have had some analysis that said they were overfished. The next time around it's going to be species that have not had that analysis, so we have no indication as to overfished or if they're growing in abundance. One idea I had, to try to get away from this concern about ad hoc, is what if we look at management actions; and as long as there has been no management actions that constrain catches or change catch rates or doing things that would disrupt the dynamics and if we know there is no system-wide problem like a year of hurricanes covering the entire region that would warp catches – and even if did, that may be okay – I was thinking of taking the last – if we have a stable period of management, you take the last five years, you take the last ten years, you do a linear regression; you take the variability of those annual catch estimates in that regression and your OFL can become the projection of that regression for the next year. Then your ABC can be based on the internal variance of those annual catches. Is that less ad hoc?

Ms. Belcher: It needs to be considered, but I don't think that it does it. I think it's a good point that should be brought in. All of that should be available when we start talking about that methodology. So, again, back to the group; what are we going to do about the proposed – again, Gregg gave us one set of dates. The other option that came up, thanks to Julie, was looking at the week after that, the week of the 18th.

That's the week of AFS. The question to the group is how many people are committed to AFS and is it going to be an overriding process? So with that, again, the week of the 11th and those dates that Gregg first put out or an alternative choice that they can see relative to SEDAR schedules and everything else that's on their time horizon. The only other offering was the week of AFS.

Dr. Neer: And just to be clear, those weeks are so that you can make changes to what you did yesterday, so that still meets the deadline for the September council meeting.

Dr. Cooper: What is our definition of a quorum because given we're going to be passing motions and possibly rescinding motions for the past year? We're going to have to make sure there are enough people at that August meeting that we can pass motions or that can actually rescind what we've already done. We need to make sure we have a minimum number of folks there so it's a legal meeting.

Dr. Reichert: What are the exact dates that we are talking about?

Ms. Belcher: The original dates that Gregg put down on the table were the 13th through the 15th in Charleston; and then the next week we hadn't talked about dates. We just said the week of the 18th.

Dr. Neer: The reality is we could probably could do it any date in either of those weeks. That was a suggestion by Gregg so I don't think it would be a problem anytime in either of those weeks.

Ms. Belcher: Okay, further discussion relative to the date timeline and what we're looking at? I have to find out from staff or somebody who can answer the question about the quorum.

Dr. Reichert: It may be useful to maybe do an inventory to see who is available on what date so we know what we're talking about in terms of availability of people.

Ms. Belcher: Okay, is it better to do – and I'm just going to offer out for most folks is it better to do middle of the week, the first part of the week, end of the week? Are you better off with a Tuesday, Wednesday, Thursday or a Monday, Tuesday, Wednesday? Let me put it this way; how many people could do the Tuesday, Wednesday, Thursday block for this meeting during the week of the 11th? That's seven.

Is there a better combination of days during that same week for those folks who can't attend during that – would Monday through Wednesday work better and for how many people would that work better? Okay, of those seven that said that they could do Tuesday through Thursday; could you also do Monday through Wednesday?

Dr. Reichert: Of the same week?

Ms. Belcher: Yes. Okay, so that puts us at seven there again. How about Wednesday, Thursday, Friday? That's eight. So, for the week of the 18th, going back to the same, Tuesday through Thursday, how many folks could do the week of the 18th, Tuesday through Thursday? What about the Monday through Wednesday? Okay, and then the Wednesday through Friday? It looks like the better week is going to be the week of the 11th, and it's about split even, but I had eight people for Wednesday through Friday versus seven for the other two block of time.

Dr. Neer: I just checked with John and Gregg and they said to pass any motions you need 51 percent. Since it's a separate meeting, you won't be rescinding any of these motions. What you would be doing is producing new motions or modifying existing motions, but you won't – when this meeting is over, you can't rescind what you put forward at the next meeting, so then you only need 51 percent to pass motions.

Ms. Belcher: Here is the problem; there are sixteen of us and eight people can commit to the Wednesday through Friday block, so that's 50 percent.

Dr. Neer: You would need one more person there to pass any motions, procedurally. That's 51 percent.

Ms. Lange: Does everyone have to be specifically at the meeting or can someone call in; and when it gets to a point – I mean, if someone who can't make to the meeting can be available for an hour or something, and we can schedule to have the discussion on a point be made when that person or several people can be on the phone; is that counted or do they have physically be there; make it like a conference call or something?

Ms. Belcher: That's a good question. We can't make 51 percent. Eight people can show up, so that's 50 percent. Is there a possibility for a teleconference or not?

Mr. Carmichael: It depends on how you wish to proceed. If you really think you're going to do something that the council is going to deal with in September that's a full recommendation, then that's a problem. If you're willing to have a subcommittee do some things that the rest of the group can consider, then maybe you can do that and have a conference call. It depends on what you want to accomplish out of the meeting. If you're going to recommend an OFL and ABC for those species, that's probably not really going to work.

Ms. Burgess: Can we just meet in September, October or November or some other time at least before our December meeting? I mean, we wouldn't be able to change anything we did at this meeting here, but we can, like we were talking before, lump these species that we talked about yesterday into the next amendment.

Dr. Barbieri: Or perhaps as an alternative, to address Ken's point about multiple meetings that have not been previously envisioned or scheduled, maybe we just dedicate our December meeting when we have total control over the agenda, right, and we just say we're not going to deal with anything else in December but this issue.

Ms. Belcher: Just from past experience, I don't see that happening. We have certain things that they expect from us; and while we have some control over the agenda, in the past that has been tried and I don't think that has ever won out.

Mr. Carmichael: You could look at the roadmap and perhaps see what is on the schedule and what you would have to do with it in December. Maybe you do part of your meeting and have an in-depth discussion about these interesting topics, about how you solve these touchy, tingly problems; or, maybe you find the time in between now and December where a group of those who really are interested in having that type of discussion get together and put something together on recommendations and first cut at something for the rest of the group to consider.

I've got a sense some would like to talk about the process and how the process should be configured and actually sit down and devote time to it without the entanglements of individual species, recommendations and all the nitty-gritty details. If there is a group that wants to do that, then we can accommodate that.

Dr. Cooper: My understanding was the reason why we were meeting again was because we don't like the OFLs that have been put forward and we were going to redo them. I agree having a process set up either during our December meeting or prior – well, that's mandatory because guess what is on our list for things to do in the December meeting is come up with more numbers, so we're going to have to do it then or before. That I think is a different issue than this meeting to essentially put forward new numbers for what we have already done so far.

Ms. Belcher: So is this something that we could do in an August meeting and kick around ideas that are alternatives to what we came up with today and report relative to those – do it as a

subcommittee; have those eight people basically do the debate and dialogue relative to the numbers that we're having issues with?

When I'm saying numbers, my understanding is it's more than 90 percent and 95 percent that we assigned to red and black grouper that seems to be a lot of the concern because they're not as conservative as they probably should be. Is that something that we could trust to the eight people to sit down and have that dialogue and discussion and then report back and let the SSC carry it at that point?

Mr. Carmichael: If you go that route, you might be better served to find the people who wish to participate in that and then find a time when they can meet, because what is the urgency of meeting in August at that point? I think Ken would like to participate in that, it sounds, but he can't be there in August. I think the higher-level process thing is much more of his interest and probably his expertise to help us through in dealing with some of these problems that people haven't solved enough to even publish on. Maybe the people who want to get into it at that level we can find a time that works for them between now and December.

Ms. Belcher: But we have a problem with what we put forward as a motion.

Mr. Carmichael: It simply means you wouldn't revisit those and you'd have what you approved earlier.

Ms. Burgess: Even if we revisit those species, if there are just eight of us, we can't do anything to change what we did at this meeting, so what good is it going to do us in the long run? Either we discuss that topic in August or we don't.

Ms. Belcher: Again, I was just thinking that in terms of having enough votes there to discuss some of this, so even if we come up with something but we're building a record in such a way that we can bring it forward to the group, then the group can either choose to endorse it or not, but at least we've kind of put some more and taken out some of that direct debate that we've been having now; that we all kind of shrug and we don't have anything better so we're just going to leave it where it is. I don't know; I'm just kind of offering up something as a potential to kind of least get that process ball rolling.

Ms. Burgess: But it seems like the reason for meeting in August is to accommodate that deadline in order to change what we did here at this meeting. If we're not able to do that with a majority and we're not able to alter anything that happened at this meeting, well, can we meet later and just discuss methods; so that when we get to the December meeting we're not scratching our heads again?

Ms. Belcher: Point taken and probably so. Again, I'm just thinking about what wording we put into that one particular motion that I thought we had said we would do this before the September council meeting.

Ms. Burgess: We did; that was in there.

Ms. Belcher: That's the problem in that motion. That's the only thing that I'm seeing is that we've asked for that specifically. Again, if there is a mechanism to take it off the table, I mean -- the time is ticking away, we're sitting at twenty after three and we're still talking about meetings. How many folks are willing to rescind the motion relative to the timeline that we put in the motion to have a meeting to readdress those issues?

Ms. Lange: The question is can we leave the motion but change the timeline to before the December meeting as opposed to before the September council meeting?

Ms. Belcher: I was thinking we would rescind it and if you want to resubmit it, we'll resubmit or redo it, restructure it, however. Andy.

Dr. Cooper: To that point and to open a huge can of worms, if the whole point of having the meeting is to change the numbers that we've approved, why are we talking about rescinding the motion to change the meeting? Why aren't we talking about rescinding the motion that put the numbers that we don't like and just don't -- I mean, a huge can of worms, we're short on time, but the whole point is if we don't like those numbers, then we shouldn't be putting that -- we should be talking about rescinding those motions.

Ms. Belcher: Point of frustration from the chair. That was approached this morning and it didn't go anywhere. I'll support anything you want, but my point is as the person who has tried to keep us on track and on line for two and a half days, it's a frustrating point to come back to something that was presented to the group at about nine o'clock this morning and we didn't go anywhere.

So, relative to the current discussion what is the action that we want to take? Do we rescind or modify the motion that Christine made relative to another meeting or do we go back and rescind all of our recommendations?

Dr. Barbieri: Well, obviously, this discussion is going to be a very important discussion, and I think we want to have the benefit of having most of the SSC members present there. Thinking about that, if we will be meeting after September and we're now having all these second thoughts about our ability to meet in August, I, unfortunately, Madam Chairman, I will go back to what Andy suggested and say, well, let's just rescind the ABC levels that we have suggested because the idea was, first, to have a chance to correct them before the council actually considers them in September.

Ms. Belcher: So my question -- this is in jest -- is how many of you are planning to be here tomorrow to sit in there and explain all this to them?

Dr. Barbieri: What time is that supposed to be?

Ms. Belcher: My report is at 1:30; and as it is right now, again, I keep throwing the time up, but we're pushing on 3:30, we have no report to present, and I'm going to have to try to put something together that, unfortunately, I'm going to have to put my head on the chopping block

and say it's my report to them, because that's the only thing I'm going to have available to me. Thank God for Andi taking notes. That's the only thing I have to give them is a boilerplate of this. So, again, as I have to go in tomorrow, how many folks are going to be able to go in with me and explain all of this? Ken.

Dr. Pollock: Is the main concern with the data-poor species of is it with all the species? Couldn't we just rescind those two species that we set one at the average catch and then the other one 95 percent or 90 percent of that? Why can't we just rescind that and then leave everything else the way it is. The other one where we had a lot more information, some people may have not been totally happy with that, but I think most people were basically happy with that.

The problem with those two species – you know, the other two species that were data poor we set to zero. Well, that's really conservative and it seemed like the catches were so low it didn't matter anyway, so we're really only talking about that one part, so can't we just rescind that part of it?

Dr. Buckel: Just one comment on that – and this is to John – how long would it prevent a regulation going in for red grouper and black grouper if we delay doing something for six months? This gets back to some work out of Erik's group showing when you delay putting management in place, you can end up being – it takes you that much longer to dig yourself out of the hole.

So, I guess for red grouper – I don't know anything about black grouper, but for red grouper putting some break in to not let it go higher, the landings go higher, that's my main concern given the changes that are likely to happen for gag in particular. I just wanted to find out from John if there is a chance for a delay or if we get something to the council in December if things would probably still stay on the same track?

Mr. Carmichael: It's hard to say what it would do because their intention is to approve it in December, and it takes about a year to make it take effect. If you didn't do anything and if you left what you have on the table now, then that's what they would go forward with; and if you try to change it in December, it might be very difficult to get it implemented or it might cause those two to bump out, which would probably delay their action.

I think you, at one point, had sort of a stop-gap bandaid for the current problem with these are interim and we're going to deal with this more that kind of got at that; deal with something now and then we'll make it better along the way. I think if you did delay it, it could end up dropping those species or nothing would happen on those or maybe the council would just set an ACL with whatever they think it should be. Maybe they'd look at what you did on others and set an ACL on that. I don't think we really know just yet.

Ms. Belcher: So, again, to the pleasure of the group, what do you want to do?

Dr. Pollock: Okay, I'll move that we rescind those two species, red grouper and black grouper, the recommendation from yesterday.

Ms. Belcher: We need a second for that.

Dr. Williams: I second.

Ms. Belcher: Any further comment or discussion?

Dr. Crosson: While he's plugging it in, I'll just state that disagree with this motion. I recognize that some people aren't comfortable with the numbers, but we are not setting the catch levels for these species. We're setting the maximum allowance that the council could consider when they decide to put whatever regulatory motions into effect. The way we're going about this right now I don't think is any improvement over what we had yesterday.

I think we have information conveyed in the resolution that we passed this morning about the uncertainty that we have with all four of those species that we passed, and so I think there are people that will be affected by this economically. I just don't feel comfortable with doing this, so I will state that I disagree with this. I don't think this is wise.

Ms. Belcher: Any comments or discussion?

Ms. Burgess: How many votes does it take to rescind an action?

Mr. Carmichael: Two-thirds to rescind. When I looked online at Robert's Rules earlier this morning, it said two-thirds vote to rescind.

Ms. Belcher: Okay, the motion is on the table. Doug.

Mr. Gregory: Just a point, administratively wouldn't it be easier simply to have a motion to reconsider and then have a substitute motion? Is there anything different about that?

Ms. Belcher: Any further comment or discussion relative to the motion? We're going on the motion to move to rescind the OFL-ABC motion for red grouper and black grouper passed by the committee on June 9th. All those in favor, raise your hand; all those opposed; abstain. That wasn't two-thirds; therefore, the motion is defeated. The original motion stands.

Mr. Carmichael: You can move on, then.

Ms. Belcher: So what do we do about a meeting; do we just skip and talk about the December meeting and say – we still have that to deal with as far as whether we're going to do a modification to Christine's original motion or however you want to do that. What is the pleasure of the group on that one?

Mr. Gregory: The council wouldn't be happy about it, but in December we can revisit all of this all over again and change everything.

Ms. Burgess: If we're not going to meet prior to the December council meeting, then there is no point in us revisiting those species, particularly, but when we come together in December we're going to have to have some method for assigning ABCs and OFLs to the rest of these stocks. I think we need to meet before December to at least discuss that.

Dr. Buckel: Kyle, I know you said that the NS-1 guidelines wouldn't be finished until the spring of '09, but would there be a draft that we could use as guidance by our December meeting?

Dr. Shertzer: The first draft should be out this summer, and I don't know when it will be available for circulation, possibly in the fall.

Dr. Buckel: Kyle Shertzer mentioned that there would be a draft out on the technical guidelines for developing ABCs; so instead of us trying to get together as group to come up with that, I agree with Kyle's earlier point he made to wait for those guidelines. We don't have to wait until '09 for the final, but there will probably be a draft and we could use that as guidance to develop ABCs in December.

Ms. Belcher: Kyle, this is a question for you, and this is out of my ignorance for process relative to what you're doing; is there any way for us to request that we get the draft? I know you have a working draft that basically isn't privy information, but is there any way that we would at least – I mean, again, we've got draft guidelines relative to what was handed out that hasn't been in the federal register yet.

Is there any way that we can have that? I mean, if you're truly saying that the draft is due in July, but if it's not a public document, we're kind of, again, in that same mode that we were in before of holding on and waiting and holding and waiting. I really don't want to see us get into that trap again. Kyle.

Dr. Shertzer: I don't know exactly when it will be available to circulate. My guess is after the draft is together in July it will have to go through some review within the working group, and I doubt it would be out before the NS-1 proposed guidelines are made final at any rate, but, like I said, possibly in the fall. At the very least, if this group has to move forward before that could be circulated, I'll have a pretty good idea of what is in it so I could at least you know maybe what the methods are that are being considered.

Dr. Cooper: Given from what I hear about Roy's displeasure of the decisions we have made so far, we may want to remind him that the more guidance he gives us as to what NMFS is doing, the better off we are, and maybe he can put some pressure to make sure that we are actually basing it on things that he might be more happy with.

Ms. Burgess: What are other councils doing or other SSCs doing? I mean, aren't we all in the same boat around the whole nation? Everybody has these same deadlines.

Mr. Carmichael: They're all floundering.

Mr. Gregory: The Gulf Council has not started this discussion. I just got e-mailed saying they want an SSC meeting the last week in July, so maybe that's the beginning of it now that the guidelines are out.

Dr. Williams: I was just going to add that I think what Kyle is working on is technical guidance, which doesn't fall under the same criteria that the NS-1 guidelines did, so that I think you guys are going to be pretty free to distribute those at any point you feel fit. It doesn't fall under the same FACA considerations as the guidelines do.

Mr. Carmichael: The timing of the Comprehensive Amendment is approval for the initial hearings – I mean approval for scoping in December and then developing options in March and June approval for hearing in September and then coming around to the final look at in December and submission in March of 2010. I think that says given that's where you're looking at doing your process that withstands multiple applications, that you could set aside some extra time in December, in your currently scheduled meeting, to talk about that and not just talk about what is in scoping, but to say let's get a jump on talking about what sort of process we'd like to see in that amendment, to really have a long discussion about stuff that would be in the options paper for March.

I think in looking at this timing it might be possible that you don't have to hold a special meeting, an extra meeting, to deal with that delayed discussion. You just have to put the time aside and maybe meet for an extra day in December or tell us you want a full day to talk about this whole ACL process and what is going to go into that Comprehensive Amendment in general terms without the cumbersome things of an individual species.

Ms. Lange: My suggestion would be to do that definitely, with that occurring at the beginning of the meeting so that if anything falls later on in the meeting, we've got the discussion out of the way.

Ms. Burgess: My concern is what if there is some prep work that needs to be done between – that we have our meeting, we come up with some way of deciding upon these and then we need somebody to go and do some analysis and we need that before we can make any decisions?

Dr. Williams: That is a huge concern. I mean, even just producing a landing stream for some of these species is no easy task because we've got unclassified categories that need to be considered, we've got reporting issues by state. This is not straightforward that we're going to have everything we need in front of us in December.

Dr. Cooper: My understanding from what Gregg said in December is he's expecting us to actually be generating ABCs and OFLs that are going into – so, yes, we will have to talk about the process either at the meeting or before. If he was correct and on our agenda is actually ABCs for all the species that are not in the ecosystem component, then, yes, there is a heck of a lot of prep work that's going to have to go into that, and we are going to have to spend a considerable amount of time talking about the process we are going to use for generating those numbers.

Ms. Belcher: So, again, what are we recommending to do, then, relative to the one motion that we have that says we'd like to meet before the council in September? How do we want to rectify that?

Ms. Burgess: I think that's not possible, apparently, so I think we need to scratch that.

Ms. Belcher: So are we rescinding another motion, then?

Mr. Gregory: It would seem to make sense to me to meeting sometime like October to look at the qualitative rankings, to pull just some preliminary information together on life history, invite some other people in to look at life history, landings trends, and see if we can get our mind wrapped around a qualitative way of doing this before the December meeting. That way if we do need more information, we'll have maybe a foot up on it.

Ms. Burgess: That's exactly what I've been saying.

Ms. Belcher: Then we need to talk with Gregg to find out what is available.

Dr. Williams: Being the usual stick in the mud in this whole thing, again, let's just look at any one of the given SEDARs; how long does it take for just the commercial group to produce a commercial time series of landings and the scrutiny that data goes through? I mean, to think that we're going to have what we need before us to even just compute average landings from some specified time period is crazy.

I mean, we need to sit back and think what is the control rule we would like to use, what is the data required to get an estimate from that proposed control rule and how are we going to get it? I don't think we're anywhere near the point at which we can be setting those in December. There is just no way.

Ms. Belcher: But, again, I think we're getting away from the original focus of what we talked about relative to that meeting was we wanted to set down the process. We keep confounding these two items back together again. We need to set that down exactly. We need the utopia of if we're going to do this and we're going to do it the right way, what do we need, how we need it, what is the format?

In the situation where we have SEDAR, this is what we want to be able to do; and the situation where we don't, what are we going to do? We've got data-heavy, data-medium and data-light, if you want to call it that. In those situations we have to come up with that process; what do see is going to be beneficial in our ability to put that forward? And, again, I think we keep rolling up this thing of process.

Working examples are fine; the idea of bringing in – again, gag has had this P-star analysis brought up so it's the poster child right now for that data-heavy, you know, a lot of information, ability to assess, so there is the first example – what are we looking at, what are the things that are missing from that that are going to allow us to do the best part of it. Getting into these other

ones where we have a lot data but they haven't been through SEDAR, what are we going to do at that stage of game? Then the ones where we don't have anything, what are we going to do at that stage?

And, again, it's picking the examples and picking the best representative, because, again, getting back to the issue of having to have the science as opposed to an ad hoc methodology, that's where we should be picking one or two of those identified species that we've discussed – again, we have red and black groupers, we have gag, we have some other data-poor issues that we're going to have to address.

Why can't we pick a couple of examples and work them through to say this is a deficiency, this is what we need, this is what is lacking, and how are we going to do the best approach; rather than bring everybody into the room at one point in time. I mean, I guess I'm just trying to vote more for if we're going to do this meeting, it needs to be in a generic form; have a couple of working examples, but the generic protocol and framework is what we really need to be targeting.

Ms. Burgess: That's what I'm saying; what do I have to do to propose to rescind that motion that we focus on readjusting those limits that we proposed yesterday and instead focus on the framework that we need to be able to do our job in December? I think it would be great if we had examples to go through of both data-poor and data-rich stocks. **I move to rescind the motion to hold an SSC meeting prior to the September 2008 council meeting to revisit OFL and ABC recommendations for Amendment 17.**

Ms. Belcher: Do we have a second?

Dr. Crosson: I'll second that.

Ms. Belcher: Any further discussion? Remember, two-thirds is what it takes to rescind this. All those in favor of the motion as written, raise your hand; all those opposed. The motion carries. Scott.

Dr. Crosson: I have another motion. I apologize, but I don't think this will be disputed. Regardless of whether we meet before the December meeting, I still think we're going to need time in December that's going to be longer than the two and an half days that we were allocated at this meeting. My motion I'm going to propose right now is that the December meeting be expanded to include an extra day.

Obviously, there is no agenda up right now, but I'm guessing that we have been allocated two and a half days in December just like we were in June, and I don't think that's going to be sufficient time to deal with everything that we have. I mean, if we decide to meet before December as well, that's fine by me, but I think we definitely are going to probably need this.

Mr. Gregory: I'd like to amend his motion to say "not on Saturday".

Dr. Crosson: Yes, I would definitely agree with that. How about the SSC be allocated an extra day of meeting time –

Ms. Belcher: Do I have a second for the motion?

Ms. Burgess: I'll second that.

Ms. Belcher: Christine seconds. Any further discussion of comments? **The motion that is currently on the table is move that the SSC be allocated an extra day of meeting time at the December 2008 meeting to specifically address the OFL/ABC process. The SSC meeting should, nonetheless, start on Sunday afternoon like always.** Okay, any further discussion? I'll put a vote to the motion as currently projected. All those in favor, please raise your hand; all those opposed. Okay, the motion carries.

So with that said, our future meeting is going to be December 2008. November 30th through December 2nd is when we are allocated for time. It's going to be in Wilmington, North Carolina. There are eight agenda items; again, just to give everybody a heads up on what the proposed agenda is: Comprehensive ACL Amendment, Comprehensive Allocation Amendment, Shrimp Amendment 7; Snapper Grouper Amendment 17; Snapper Grouper Amendment 18; Mackerel Amendment 18, the FEP and the CEA, and SEDAR 16 and 17.

Okay, that's it on the meetings. Other business is, of course, determining who the chair and vice-chair elect will be. They will basically come into office starting at the end of the December meeting. I will still be chairing December, and then basically your first meeting as chair and vice-chair would be the following June, or a year from now. What we are looking for are nominations for chair and vice-chair. Scott.

Dr. Crosson: Are you required to step down or are you also ready to step down?

Ms. Belcher: It's kind of in the past what we've done is just let people put forth the nominations that they'd like to see for those two. There have discussions about rotation similar to how the council has done where you hold it for two years; the vice-chair ascends to the chair; the chair steps down and the new vice-chair comes in. We've never been held to that. Jim Berkson was chair for how many years, five or six?

Mr. Carmichael: How long did he take it over, three years, four years?

Ms. Belcher: I think it was longer than that.

Mr. Carmichael: I think it was like four.

Ms. Belcher: I think it was at least two cycles, two and a half cycles, so this would have been like his sixth year, I think, as chair.

Mr. Carmichael: From '03 to whenever you started.

Ms. Belcher: Which was over a year ago. Okay, Erik.

Dr. Williams: I will acknowledge that and remind everybody that a NMFS person cannot be the chair and vice-chair.

Ms. Belcher: So, nominations – we'll start with chair.

Dr. Crosson: I would nominate Carolyn Belcher to be chair again if she is willing to serve. A lot of turnover has happened with this SSC, and I think it would be good to have some continuity.

Ms. Belcher: I'll represent the group if that's what the group wants, I'll put it that way. I'm opposed to it, but at the same time I want it to be the group's decision that that's what they want. Again, just because there is a name on the table, I want to make sure everybody is happy with that choice.

Dr. Reichert: I'll second that.

Ms. Belcher: Any further nominations? Thank you, I appreciate the vote of confidence and I will continue to do my best to serve as the chair of the committee. Now, nominations for vice-chair. Doug.

Mr. Gregory: I nominate Luiz.

Dr. Crosson: I'll second that.

Ms. Belcher: Do we have any further nominations?

Dr. Barbieri: I nominate Doug Gregory.

Ms. Belcher: Is this an official one; do I have to ask for a second? Is there a second? No second? We have one nominee. Anyone else suggesting anyone else?

Dr. Barbieri: Well, I'll nominate Andy Cooper.

Mr. Gregory: You can, you know, just say you don't want to do it if that's your point.

Dr. Barbieri: Well, I wish I could do it, but I really can't. I already sit on the Gulf Council's SSC.

Ms. Belcher: You totally buttered me up, and then he stands around and says he's not going to do it.

Dr. Barbieri: Okay, I'll do it.

Ms. Belcher: With that said, I declare that Luiz Barbieri will be our vice-chair. Okay, Julie Neer has pointed to me that we were looking for and we had deferred until later in the meeting relative to a representative for – we need a reviewer for SEDAR 16. That's the king mackerel one. We need a reviewer; you agreed to be an observer. It's August 4th through 8th in Jacksonville.

Dr. Barbieri: Doug is already going as the SSC observer.

Mr. Gregory: If I may, I'm going as the reviewer for the Gulf of Mexico Fishery Council; if you so desire.

Ms. Belcher: Does that work, John? Is it a problem for him to act as a dual reviewer?

Mr. Gregory: I accept.

Mr. Carmichael: Is it violating a technical guideline; no. Do you want to leave it all in his hands? Well, he does know as much about mackerel and has the most experience of anyone remaining on the committee. It could work. It might be nice if someone else went for moral support. I think NMFS people could do this, but a NMFS person is kind of tied up with a couple of other assessments at the same time. We don't have that many people when it comes to that.

Mr. Gregory: Right, well, council staff specifically wants somebody else besides me to go. I mean, that's very clear, so I think council staff will be disappointed if somebody else doesn't go.

Mr. Carmichael: I'm fully pleased to have Doug go and have complete confidence in his abilities.

Mr. Gregory: From other staff.

Mr. Carmichael: Okay, but if anyone else wants to go it's a great opportunity to sit there and be a reviewer, rub elbows with the CIE. If not, we'll carry on.

Ms. Belcher: I still see no volunteer. I remember we said we were going to rotate people. Okay, we still have an open spot. At least think about it. If it's something that you're interested in, try to let me know something as soon as possible. If I don't hear from anybody in the next two to three weeks, I'll pretty know it's a dead subject, but at least put it as a consideration. I'd like to say we're adjourned but we actually have to write a report.

Ms. Burgess: Whatever happened with meeting before the December meeting to discuss the method that we're going to use to select these species in December?

Ms. Belcher: The dates that we got were October 13th through 17th as a potential; October 20th through 24th; November 17th through 21st. I can already tell you that the way things look, I will not be available the 20th through 24th, so if my absence is not wanted, that week is out for me.

Dr. Williams: Isn't one of those weeks the review workshop for vermilion and Spanish mackerel, and don't we have an SSC member assigned?

Mr. Carmichael: I have October 23 and 24 as a SEDAR workshop. I agree with Erik; I just wanted to say that on the record.

Dr. Williams: And who is our SSC representative for that meeting or a reviewer; do we have an SSC reviewer for that one?

Ms. Belcher: Those were the "no" dates, so every week aside from October 13th, October 20th, and November 17th, any of the other weeks.

Mr. Carmichael: November 4th is election day. There is just not a lot of time, honestly. There is not a lot of time.

Ms. Burgess: What is available in October?

Dr. Stephens: It looks like the end of September through the 3rd of October, which is a Friday, that week is open. The 6th through the 10th of October is open; the 27th through the 31st is open in October.

Ms. Belcher: I thought part of what we were doing was tacking a day on to talk procedurally to the December meeting, but we're still looking for another week?

Ms. Burgess: The concern is that if we tack another day on, that we're going to need some additional analyses done in the interim.

Ms. Belcher: Okay, I lost track of that, sorry.

Ms. Burgess: If we met in October, would there be enough time to get whatever analyses done we needed by December?

Ms. Belcher: It's going to depend on the scope of the analysis and who has to do it, I guess. I mean, that's kind of an unknown there.

Ms. Burgess: I just don't want to get into the meeting in December and keep chasing our tails again. I really don't want to see that again.

Mr. Carmichael: Are you going to have anymore information now then than you have now?

Ms. Burgess: Probably not but we're being forced.

Ms. Lange: Well, I would think one thing that we could do – and I don't necessarily know that it needs an actual meeting, but to sit down and identify what data sets would be useful for the December meeting that could be potentially generated; you know, what catch streams, what

survey indices or fishery-independent indices are available for other stocks. I know that the Center is really inundated already, but if we can at least put together a wish list and identify what those are. Again, it doesn't necessary need to be at a meeting, but just so that we would have something.

Ms. Burgess: Didn't we already make a motion to ask for the probability analysis on some of those species that we're able to do that for, and would that be available for December?

Dr. Buckel: I was just going to agree with Christine; I think we had a motion asking for those, the P-stars for assessed stocks and then for the data-poor stocks we had a laundry list of items. And, Kyle or Erik, if you can suggest a specific data stream that you guys feel, after all these assessments that you've done, that maybe it's a catch-per-unit effort, you know, doing these indices, GLMs and some landings or catch-per-unit effort data and provide that, because that's usually a good indicator of the status – if you could make a recommendation on that line, then maybe the SSC could recommend just one thing that would decrease the workload.

Dr. Williams: I actually prefer Anne's suggestion of let's make the full wish list and then you can tick off things after you've done that, but I think it would be worth trying to actually flesh out the entire wish list of what we would need to do this. That wouldn't have to be done at a meeting; it could be done via e-mail.

Ms. Lange: And I would think that the sooner we could do that, the better – I don't mean like this week or something, but sometime before October, so that if there is a possibility that the Center could pull some of those things together, that they would have some time after the wish list was put together to do that. It may be even be appropriate to try to prioritize which stocks – with the expert knowledge that's available within the committee or with guidance from the council on which stocks are in most need of at least something.

Ms. Belcher: I'm still getting confused on are we discussing designing a process or are we going back to addressing specific species again? To have a wish list, we have to have an idea of what the process is. We still don't have a process. I mean, I'm getting a little bit confounded because I keep hearing about catch streams and this and that, but somehow that's saying that we know what we're going to need and we don't know; do we?

Ms. Lange: Well, my thought was that if we can start thinking of the types of data that we would need no matter what the bottom line is, you know, catch streams – the lowest common denominator hopefully would be some level of catch streams. If we have survey indices – I mean, we can't really make a decision on what we're going to use unless we have an idea of what types of data are available.

I personally don't know. Most of my analyses were done in the northeast. I personally don't know what the Center has or what the states in the southeast have specifically for data on what levels of stock, what combinations of stock. If we could just, again, pull together a list of what is available, then we can maybe get an idea of what to do to use as a process.

Ms. Belcher: But, don't we still get at the point that every species is going to have to be considered independently. If we pick one particular species to look at, it may have one set of data streams available to it. If we pick another species, it may not have all those available things. I don't know; I'm just kind of throwing that out because, again, I still feel like we need some sort of framework. I understand where we're going with it, but we still don't have that generic frame.

Ms. Burgess: It almost sounds like we're trying to do a trends analysis on all these species, and I think that's a little overwhelming.

Ms. Lange: Can we start out with a matrix of what is available? If we've got 72 stocks, which ones have catch data, which ones have a full complement of catch data, which ones have survey indices that in the opinion of the Center or whoever is working on those, the states, they feel are reasonable. This may have already been done. Again, I'm new to this committee so I don't know – which ones have CPUE?

Then with something like that, with a matrix to start with, if we're going to start talking about what options we have for setting – you know, for the tiers, at least we know what range of data are available. I mean, if we wind up with 60 of the 72 species with nothing but a catch stream, then we can sort of focus on how to evaluate that, but if we've got half of them with catch per effort or with survey indices – and, again, life history parameters, if we have no knowledge about the life history or if we have fecundity estimates and mortality estimates – I mean, there is a whole range of different pieces; if we can at least get an idea of what is out there or what is available.

Dr. Williams: I get your point, Carolyn, that it seems like we're getting ahead of the process, but in a way we have to. In other words, we know the Center is going to have issues trying to get some of this information together, so we need to put that request in ASAP and then move on to focusing on the process.

We can make it a blanket request that we need landings on every species, if possible; we need per-recruit analysis on every species, if possible; we need abundance indices for every species, and let the Center deal with that when they get the request, but at least let's get the request moving so that they know what we're thinking we need to do this properly. Then we can flush out the methods at the December meeting, the process, and see where we are at that point.

Ms. Belcher: Well, what Anne was stating, that was kind of more to the point that I was trying to get the answer to. I mean, I understand that situation, an inventory relative to species I understand. But the idea to me of just pulling it all together in hopes of having it but we still don't know what to do with it, that was my point. I would hate to see us put a lot of effort into waiting on something to make the process happen.

Dr. Williams: And I can't resist pointing out at the last two, at least, possibly three SSC meetings, I have suggested and requested that we need to get a trends report moving. Once again, I'll state it again, what we're really looking for is a trends report.

Ms. Belcher: Can we get a motion that recommends that since we've already asked the council to ask –

Dr. Barbieri: We have one, if you look at our list of motions.

Ms. Belcher: But specifically the trends report as well. Okay, any other discussion? We're still trying to figure out what we're doing about the meeting.

Mr. Carmichael: A fair amount of the data has already been tabulated for what you have before you. You have headboat information, you have MRFSS information. We have that so we have that individual species. Twenty or so species, thirty species over a long period of time accomplished 90 percent of the landings, so there are a lot of species that aren't really there.

We could give you something that showed which species show up every year or which species are in which data base. We could ask MARMAP to tell us which species they encounter that they might be able to do something with. There is stuff like that from SEAMAP reports. We can do that sort of thing and most of it is largely done if you want it on a species' basis.

Dr. Williams: Well, my concern is that what we have is incomplete. For instance, it doesn't go back in time as far as we'd like. We don't know how those landings were generated. For instance, black grouper, we know there are species ID issues with that; yet there is no documentation on how that was generated. CPUE indices are no easy thing to compute. I would hate to see some simple ad hoc method done.

I mean, that's what I think we need to be careful about just ginning up data just for the sake of a really quick analysis. As I pointed out earlier, look at all the process that goes through in a SEDAR meeting to just try and generate a commercial landings time series. It's a lot.

Mr. Carmichael: It would just sort of be more of a contents; where does the species exist; where does the snapper grouper species exist; and then, yes, to get the CPUE is going to be a nightmare for stuff that shows up as a couple of fish every year. It might help you with the ecosystem movement to see how many species hardly ever show up in any of the fishery records. You know, MRFSS only go back to '81; commercial we can go back farther, but as we know from the SEDARs these species compositions gets pretty poor when you go very far back.

Dr. Stephens: I think the data are poor. I think that it is hard to document what is going on and to generate CPUEs. I think that speaks to Carolyn's point about having a process irrespective of what data actually exists.

Dr. Buckel: I just want to echo what Anne said earlier that a lot of us don't know the details out of the 73 species which ones are just – you know, there's just a few hundred pounds caught a year. That table that Anne requested, maybe we need to make a motion for that.

Dr. Stephens: I think staff can generate that.

Ms. Belcher: So now what about the meeting again? What do we want to do about this meeting?

Dr. Williams: It seems like it boils down to – we already added a day to the schedule in December; is that enough to come up with a process in our minds right now? Do we think we can come up with a process in one day; and if not, then we probably need an earlier meeting to start the development of a process.

Ms. Belcher: Any comments to that?

Dr. Cooper: I guess I can say this. How much push-back – is Gregg here – how much push-back can we have against Gregg in saying, you know, in December we're not going to be able to put numbers for the Comprehensive Amendment? The other point that was made is not only do we need the method, we need the data, we need the data that's been cleaned, that we trust. I don't know if you can make this a formal motion, but that our discussion at the December meeting relative the Comprehensive ACL be limited to methods, methods and data needs.

Ms. Belcher: I don't like the fact I didn't see where that smirk came from, Erik.

Dr. Williams: Well, I'm just going to point out that, well, we just did it with much less data. We just did it for black and red grouper with the data that was handed to us, wasn't reviewed, simple raw dump of data from a few data bases. Why suddenly are you now asking for a higher level of scrutiny on the data that we need in December?

Dr. Cooper: Well, for one, those landings data I don't think were just dumped from a data base. I thought those were official landings records that have been reviewed. Also, there are times when we have to make best available science, and part of what I was saying is we had to make a decision. What I'm saying now is I raised the question of can we push back? You brought up can we push back for that and no one seemed to want to do it.

There were motions up there and you could have argued, no, we should just push back. I'm raising the issue now rather than doing it in December and saying, okay, can we actually put our foot down and say, you know, for this Comprehensive ACL Amendment, which is going to be a big, ground-breaking methodological thing – you know, do we want to make sure, going forward, that, hey, let's make sure we do it right, that we've got the right data in hand, because part of it is sitting down and figuring out, okay, what data are available?

And, if we're then basing how we're doing the assessment on what data – you know, how we're setting ACLs based on data availability, well, we're going to have to make sure that if we have it checked off on the list that this data exists that we actually then have that data. So, yes, I mean, right now I'm more in your camp and saying, hey, if we've got the time and they're not needing numbers, can we push back and say, you say, you know, let's make sure for the Comprehensive Amendment, let's make sure we're being comprehensive. It's just a thought.

Ms. Burgess: I thought he said, when he was sitting over here, they needed preliminary numbers or their final numbers to be in next June, so maybe they don't need actual numbers. I don't know why they would need preliminary numbers and not final numbers. I don't know what they're going to do with preliminary numbers.

Ms. Belcher: I think because some of that, especially like red snapper, it was something to put in until we could get the numbers out of the new – that was part of the thing was that we kind of had that open space. I'm just speaking for one particular species that was there.

Mr. Burgess: Can we get Gregg and ask him?

Ms. Lange: Well, the other difference was that the stocks we dealt with earlier this week were the ones that there is overfishing already occurring and we wanted to make sure we at least put some sort of a limit. When we did that, we subsequently said that we were going to be reviewing those again as part of the Comprehensive Plan so that we can hopefully have better numbers to use and have something laid out on how to do it.

Dr. Cooper: And also, just to cover my own butt, I'll also remind Erik that I wasn't at the discussions for the data-poor species, and I also did vote to rescind – I voted in favor of rescinding those two motions that set the OFLs for the data-poor species. I have actually been fairly consistent, in my opinion, but just for the record.

Ms. Belcher: To that point, Erik, because otherwise –

Dr. Williams: Well, I just find it interesting that he has to feel that he needs to be defensive on this.

Mr. Carmichael: For those who aren't as familiar with this fishery, here are the top 20 species from the logbook, cumulative '99 to 2006, snapper grouper fishery logbook; 20 species there reported in the logbook, or 96 percent of the landings reported as the logbook fishermen, so there are a lot of species that aren't a lot of landings and that aren't probably significant players in these fisheries.

You know, you do the same thing for the recreational and the headboats, MRFSS and the headboat, and you're going to come up with another group of species. I have looked at this and I just couldn't find it, but there are about five species that actually are in one and not the other. You know, white grunt, for example, is pretty high on the recreational and the headboat, but it's number sixteen in the commercial here. It's still in there.

As part of this how deep do you want to go into a lot of these species that are, in many cases, not even showing up in the record? That's sort of the thing. I think that's where we have to talk about the process and what we get, so maybe the contents alone will be a big first step to help you focus in on what species you think are worth devoting more effort to.

Ms. Lange: Well, again, that's exactly what I was talking about, something to help us focus in on what may or may not need to be done.

Mr. Carmichael: I think we can do a lot of that without tapping into the Science Center and getting into things to do a CPUE on or to try and deal with more detail and try to winnow out the focus areas and then you focus in on what you're going to try to do more analyses for. Staff can provide you a lot of these things that have been put together for other needs around the council; and then over e-mail or something you can try to winnow out something that you want to dig into in depth.

Ms. Lange: I do have one other question. The Comprehensive Amendment isn't just snapper grouper, is it? It's all the other things so it's beyond the –

Mr. Carmichael: Dolphin, wahoo, cobia, little tunney. The bulk of the species that we don't know anything about are at least in the snapper grouper complex.

Ms. Burgess: Well, since Gregg is here and we've already asked this question; do we have to have preliminary numbers in December or can we wait until June to give you those numbers?

Mr. Waugh: This is for the Comprehensive ACL Amendment? I guess it could wait until June. We were just hoping we'd get something so that we can get started on the options with the committee, but if your feeling is that you can't give us any numbers until June we'll just have to deal with that.

Dr. Cooper: Here is the issue. We need to flush out the methodology. Well, first we need to figure out what data are available. We need to flush out the methodology. We need to get the data. Then we need to apply those methodologies to the data. Looking at the calendar, there might be one time to meet when some people can meet.

The preliminary technical guidelines, I think is what they're called, aren't to out until the fall, and even then we've been told it's not going to be a recipe. It's going to be, well, here are some methods that might work, and so preliminary numbers by December, we'll be lucky if we can get data by December, from what I'm understanding. That's kind of where we're at right now.

Ms. Belcher: What do we plan to do, then? Are we just going to wait until December?

Mr. Carmichael: We are going to try to provide you contents of various data sets and summarize what we know about the fishery. Staff will get that out to you just to really try to bring everybody up to speed on what are the big players and what aren't, provide you everything we get between now and then on any guidelines, proposed rules or anything, and hope the committee can then exchange some e-mail and try to focus in on whatever specifics you might want.

Ms. Lange: At the risk of complicating this, John, you had mentioned a couple of time earlier that the council is looking at setting up technical committees. Has that just not gone anywhere or

is that something that might be happening between now and – I mean, to try to pull some of those things together?

Mr. Carmichael: It's something we're trying to get people named for, trying to identify those who wish to participate mainly and then hone in on exactly what they're going to do beyond participating in SEDAR assessments.

Dr. Williams: I was going to add that in the analyses I have had to do at the request of the Center Director to look at where we are with respect to establishing ACLs, I've got quite a bit of information to add to where we stand with various species information-wise, so I'll get that out to everybody.

Ms. Belcher: Any further discussion relative to that? I guess we've taken the meeting motion off; so with that said, I guess we don't have to offer up another particular set of dates at this time. We have 30 minutes to work. We don't have time to go back on the record so with that we'll adjourn the meeting.

(Whereupon, the meeting was adjourned at 4:30 o'clock p.m., June 10, 2008.)

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SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE

**Renaissance Orlando Hotel Airport
Orlando, FL**

June 8-10, 2008

INDEX OF MOTIONS

PAGE 39: Move that the SSC approve the Spiny Lobster Import Amendment to go out for public hearing. Motion carried on Page 39.

PAGE 53: Move that the flattop selectivity curve be used for conversion of the recreational allocation in weight to numbers for snowy grouper in Amendment 15B. This would result in converting the 4,400 pound allocation to 523 fish. Motion carried on Page 55.

PAGE 55: Move that is the best available science. Motion carried on Page 55.

PAGE 58: Move that the SSC endorses Amendment 15B as based on best available science. Motion carried on Page 58.

PAGE 67: Motion that the SSC suggests to make Alternative 3 the preferred alternative. Motion reworded on Page 69: The SSC suggests Alternative 3 reflects the best available science for monitoring bycatch in Snapper Grouper Amendment 15B. Motion carried on Page 69.

PAGE 87: Move that despite appreciation of the effort extended to address bycatch reduction in Amendment 16, the committee determines that the measures intended to reduce bycatch mortality are not best available science due to a lack of analysis on the effectiveness of the proposed measures.

PAGE 91: Move a substitute motion to move despite appreciate of the effort extended to address bycatch reduction in Amendment 16, the committee determines that the justification for measures as applied to the species addressed in Amendment 16 intended to reduce bycatch are deficient and strongly urges that language be included to clearly document the effects of such measures. Substitute motion carried on Page 91. The substitute motion carried as the main motion on Page 91.

PAGE 92: With the exception of those points noted in the previous motion regarding the bycatch reduction section, we determine Amendment 16 is based on the best available science. Motion carried on Page 95.

PAGE 118: Move to recommend that yield at MFMT equal OFL and yield at 75 percent FMSY, which is the current SAFMC default definition for FOY equal to ABC as a reasonable interim step to address the species in Amendment 17 and assessed through SEDAR for gag grouper, for which a probabilistic examination of overfishing is available; establish an ABC consistent with the level adopted in December 2007.

ABOVE MOTION REWORDED ON PAGE 123: Move to recommend that yield at MFMT applied to projected biomass equal the OFL and yield at 75 percent FMSY, the current SAMFC default definition for FOY, applies to projected biomass equal ABC as a reasonable interim step to address the species in Amendment 17 and assessed through SEDAR. For gag grouper, for which a probabilistic examination of overfishing is available; establish an ABC consistent with the level adopted in December 2007. Given the ACLs must be established annually, this interim approach will be assessed each year. Motion carried on Page 123.

PAGE 123: Motion that the SSC recommends to the council that the council request the assessing organization for each of these SEDAR species, that they perform a probabilistic analysis to give us an estimate of the probability of various catch levels. Motion carried on Page 124.

PAGE 131: Move to set OFL equal to the average landings over the last five years for those species; and ABC equal to 90 percent of the OFL. Motion failed on Page 132.

PAGE 133: Move that we set the ABC level for speckled hind to zero. Motion reworded on Page 134: Move to set ABC for speckled hind to zero and to recommend that the OFL is unknown. Motion carried on Page 134.

PAGE 134: Move to set the ABC for warsaw grouper to zero and to recommend that the OFL is unknown. Motion carried on Page 135.

PAGE 136: This is for red grouper only – equal to average landings over those last five years, an ABC of 95 percent of OFL. Motion carried on Page 136.

PAGE 136: Move to set the OFL for black grouper equal to the landings over the last five years, 2003 through 2007, an ABC of 95 percent of the OFL. Motion reworded on Page 128: Move to set OFL for black grouper equal to average landings over the last five years, 2003 through 2007; and ABC to 90 percent of OFL. Motion carried on Page 141.

PAGE 143: Move to add black grouper and red grouper to the SEDAR assessment schedule ASAP; recommend that white grunt be replaced by red grouper; and hogfish be replaced by black grouper in SEDAR 19. Motion carried on Page 144.

PAGE 146: Move that there is no scientific basis for the shallow water and deep water species groupings proposed for Amendment 17 and that the SSC cannot recommend OFL or ABC levels for the grouping. Motion carried on Page 146.

PAGE 151: Move the acceptance of the report. Motion carried on Page 151.

PAGE 172: Move to hold an SSC meeting prior to the September 2008 council meeting to revisit OFL and ABC recommendations for Amendment 17. The committee will evaluate uncertainty in individual assessments and the probability of overfishing at various exploitation levels for assessed stocks. The committee will evaluate life history, fisheries trends and population dynamics' information for the unassessed stocks. The committee will develop OFL and ABC recommendations. Motion carried on Page 172.

PAGE 174: Move that the ABC levels for Amendment 17 set by the SSC in previous motions on Monday, June 9th, 2008, do not explicitly account for uncertainty in factors such as stock assessment results, time lags in updating assessments, the degree of retrospective revision of assessment results, nor projections. Motion carried on Page 174.

PAGE 184: Motion to approve the Red Snapper Stock Assessment as best available science. Motion carried on Page 184.

PAGE 190: Move that we accept the Greater Amberjack Assessment as best available science. Motion carried on Page 190.

PAGE 195: Motion to accept the SEDAR 15 as the best available science for mutton snapper. Motion carried on Page 195.

PAGE 223: Move that we rescind those two species, red grouper and black grouper, the recommendation from yesterday. Motion failed on Page 224.

PAGE 228: Move to rescind the motion to hold an SSC meeting prior to the September 2008 council meeting to revisit OFL and ABC recommendations for Amendment 17. Motion carried on Page 228.

PAGE 229: Move that the SSC be allocated an extra day of meeting time at the December 2008 meeting to specifically address the OFL/ABC process. The SSC meeting should, nonetheless, start on Sunday afternoon like always. Motion carried on Page 229.

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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.

Scientific and Statistical Committee Meeting Orlando, FL Sunday, June 8, 2008

NAME &
ORGANIZATION

AREA CODE &
PHONE NUMBER

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Scientific and Statistical Committee Meeting
Orlando, FL
Sunday, June 8, 2008

NAME &
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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.

Scientific and Statistical Committee Meeting Orlando, FL Monday, June 9, 2008

NAME &
ORGANIZATION

AREA CODE &
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Scientific and Statistical Committee Meeting Orlando, FL Monday, June 9, 2008

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Scientific and Statistical Committee Meeting Orlando, FL Tuesday, June 10, 2008

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