# SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL 

## SNAPPER GROUPER COMMITTEE

Hutchinson Island Marriott Stuart, FL

June 10-11, 2009

DRAFT MINUTES

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The Snapper Grouper Committee of the South Atlantic Fishery Management Council convened in the Ballroom of the Hutchinson Island Marriott, Stuart, Florida, Wednesday afternoon, June 10, 2009, and was called to order at 2:40 o'clock p.m. by Chairman Mac Currin.

Mr. Currin: I will call the Snapper Grouper Committee to order. Good afternoon, everyone. Everyone has had an opportunity to look at the agenda. I have one addition. I would suggest that we provide some time at the very beginning of our meeting to Dr. Frank Hester to explain the report that all of the council members received regarding the Red Snapper SEDAR. George.

Mr. Geiger: I don't have an objection to that, but I just wanted to recognize the fact that certainly I and I know all my fellow council members heard loud and clear the comments of the public last evening. I would like to express my appreciation to the public for the civility of the comment and the public discourse last night. It's appreciated. Oft times we start these things and we never even acknowledge that there was a public hearing, and I just thought it would be appropriate to let them know that we did hear them last night.

Mr. Currin: Thank you, George. Without objection, the agenda will stand approved. Everyone has received audio files of the minutes from our last meeting. Without objection, those minutes will stand approved as well. Before we ask Dr. Hester to come up, I wanted to acknowledge Jack Travelstead and Red Munden from the Mid-Atlantic Council. We're delighted to have you. Dr. Hester, welcome, sir, and we appreciate you hanging out and being available here to speak with our committee regarding the report that you prepared for the Southeast Fisheries Association and East Coast Fisheries, on SEDAR 15. We'll turn it over to you.

Dr. Hester: Thank you very much. I appreciate this opportunity. For the record I am Frank Hester, a marine biologist, and I am working for the East Coast Fishery Section of the Southeast Fisheries Association to review for them the SEDAR portion for the red snapper of SEDAR 15. We thank you very much for this opportunity to present something to the council.

I was at the public hearing last night, also, and I would like to remark that it surprised me, the almost unanimous feelings of the people present that they have concerns about this assessment. I've been through a number of these over the course of the years, and I've found that usually when the majority of the users of a resource express their opinion that the resource is in better shape than the management advice, that they probably have reason and are correct.

Let me go ahead with the presentation, and I'll give you some of our concerns and some of our reasons that we believe that the assessment is at least more pessimistic than it should be. I've changed the title of this over to "Where have all the Sow Snappers Gone?" because this seems to be one of the main concerns at least in our group that the assessment is saying that in essence the spawning biomass is practically down to the baseline; you can barely see it.

If you look at the age structure of the population you will see that the assessment projects that in 1945, at the time that the population was close to carrying capacity, through the course of the decades the number of fish ten years and older have decreased to the point where they again are lost in the baseline, and this is the spawning population, and all the large fish then are practically gone.

Yet the fishermen say that there is an abundance of them, especially coming up next month and the next month when they come in to spawn closer to shore. This is something that needs to be addressed in the long term, but at least you have to remember that this prediction is out of the model and is not necessarily what is really happening in the ocean.

The model that is being used is the statistical catch-at-age model; and what it does is balances a number of inputs against what is thought to be going on in the fishery, to match as closely as possible what they believe is the real situation in the fishery. The data that is included is the total catch by fishery and year. Of course, in the case of most of the fisheries here, we don't have much in the way of information about the total catch that goes back much beyond beginning in 1980. In this assessment we're going back to 1945.

Here is the data base that goes into the model, and you can see that in terms of landings this is the catch and this is the catch-at-age model so it depends primarily on catch for its major signal. The commercial handline catch actually goes back well before 1945. How good these data are is debatable, but there are data.

The commercial dive boat is something new; commercial diver is a new index or a new data set. Headboats s start in 1972 and the recreational fisheries really starts with the Marine Recreational Fishery Statistical Survey in 1981, which was really bad in 1981, but by 1983 it had gotten into some kind of a condition that was usable; so from 1983 onward it's probably providing some kind of signal.

The discards are the discards. They don't really come into being - there is no record of them until '84. The indices that can give the model some indication of what is going on in terms of the fishery itself, the catch-per-unit effort are three; the commercial handline one, which starts in '93; the headboat one, which started in '76, but has very poor confidence intervals; and the Marine Recreational Fisheries Survey, which started in '83, and it's also very poor, very imprecise.

What is missing is the catch data for the recreational fisheries in the earlier years; the catch composition, that age or length composition. Actually the recent catch composition is not as good as it could be. The indices of abundance, as I mentioned, are generally not very reliable. Then there is a number of biological inputs that are - well, actually all of them are pretty poor. Natural mortality is estimated by formulas. Fecundity; there are some studies but they're not very conclusive.

The model itself does not use behavioral or seasonal distribution that could affect the availability of the fish to the fishery. For example, as I said, the sows are coming in in June and July for spawning, and so they will be available inshore, but I'm told that then they move out and are probably not available to boats that are not going off to find them scattered on the various pinnacles and reefs offshore; so that you get a picture of - depending on which time of the year you're sampling, you may get quite a different composition in terms of length and age and also in terms of abundance. This information is not included in the model.

As I said before, essentially all the data before 1984 is estimated by the model or has been interpolated back to 1945 in terms of the catches. What was done in the data workshop for the recreational catch, they took the average over the last three years that they had data in the MRFSS data and then interpolated it back to zero in 1945 so that you had a constantly declining amount of catch back to 1945.

So what you get when you look at the catches that are reported from the data workshop is this type of a distribution. There were no recreational catches prior to 1981, but those are entered into the total catch picture by this interpolation, which I told you, so they're in there. If you look down at the last five years or for 1945 you can see that little straight sloping down; that's primarily the recreational catches with more or less level handline catches in there.

The catch picture is essentially flat all the way across and comes up to a peak in 1965 and then another one just about 1975 and ' 85 and then comes down a little bit, but essentially is flat and not very informative in terms to trying to interpret what is going on in the fishery unless you know how much effort is going into producing this, and, of course, these data are missing.

Evidently this caused a problem to the model in the assessment workshop. They don't tell us why they had a problem, but they do say that during their preliminary model runs they felt that they needed - that's not really fair - they felt that there was an indication that the landings must have been hire during the earlier period, and they're probably right.

I don't think that interpolating the recreational catch to zero in 1945 is quite right, although I imagine that the recreational fisheries right after the war were probably not what they were ten or fifteen years on, so there probably was a continuing increase in that period. But, nonetheless, the workshop felt that there was need for additional catches in that period before 1980, and their problem was where they were coming from and in what amount.

In the data workshop the recreational working group had looked at some papers from surveys done earlier by the Fish and Wildlife Service. These were actually interview surveys that identified households that went saltwater fishing, and over the U.S. they had I believe about 1,500 or 1,600 families that were identified.

These were broken down into regions, including the South Atlantic Region; and within those regions the people were surveyed and asked had they gone saltwater fishing, where did they go fishing; did they do it off the dock, off the beach, off a boat; what did they catch and how much did they catch and how much did it weigh.

So these answers were then put into the survey report and were - for example, if they had 40 respondents in the southeast, these would be multiplied by the number people that they thought went saltwater fishing. This number came out of the census data, and so they were then multiplied by this number and expanded to get a total catch in terms of numbers and weights for the various species.

Here is the summary of the data for the Fish and Wildlife Survey and the three years that they ran the survey; 1960, 1965 and 1970. In 1960 they just said snappers, and so they got a large
number. These are in thousands of fish, so that's $9,400,000$ snappers that weighed $24,000,400$ pounds. They found out, when they did it again in 1965, that most of those snappers were yellowtail snappers.

In 1965 and 1970 they put red snapper in as a category, and they got these numbers, 500 or almost 600,000 red snappers in 1965 and most 2 million in 1970 . You can see the yellowtail snappers are quite a bit more. What happened is the assessment working group then went back to 1960 and prorated the snappers into red snapper and yellowtail snappers based on the ratio of red snapper and yellowtail snapper in the second two of those surveys.

The assessment working group then had three years of data to enter into their model data base, 1960, 1965 and 1970. When they did that, they then did the interpolations in between and came up with this for total catches, their landings. You can see - I'm going to toggle down here there are the old data workshop total landings, and then here is the new one that the assessment was based on.

You can see that it is a substantial numbers of weight of fish, almost 8 million pounds in 1970 of red snappers that were caught for the model. This doesn't mean these fish were caught, but they're there for the model. They were raised by some statistical estimate of the number of fishermen that may have gone fishing with red snappers times the number of red snappers that the ones that were interviewed that said they caught red snappers.

This is a lot of fish and the numbers are not very reliable, I don't believe. If we go now back to the summary of the Fish and Wildlife Service data and forget about 1960, which was prorated, you can see that there were numbers, weight ; and from the two you can get an average weight, and the average weight in pounds is a little over three pounds, which would be a small fish. Some would be mature but most would be immature; these less than three pounds and probably less - 2-1/2 years old, less then 3 years old and probably just starting to come into maturity.

Here is the result from the model. When these numbers were put into the model, the model then was able to estimate catch at age for every year from 1945 to 2006. The estimates for the years 1965 and 1970 are given here. In 1965 they estimated that there were 229,000 fish caught, and in 1970 628,700; and the weights were 2.5 million pounds and 6.2 million pounds; and the average weight were a little less than five pounds and a little bit more, or about 4-1/2 pounds.

This is the result from the model. It is telling you this is the way the population structure of the red snappers looked after including these data from the Fish and Wildlife Service. Now, compare that with the Fish and Wildlife Service data; the Fish and Wildlife Service data say that in 1965 about twice as many fish - a little more than twice as many fish were caught than the model says were caught; and in 1970, almost three times. In terms of weight, considerably less weight was caught in both cases, and that the average weights, as we saw before, are considerably less.

So what that means is that the stock assessment estimates that more than 70 percent of the catches were spawning age fish; whereas, the Fish and Wildlife Service data indicates that less than 50 percent were spawning age fish. The stock assessment estimates that 1.7 million pounds
were spawning age fish. The Fish and Wildlife Service estimates that 0.97 million pounds were spawning age fish in 1965.

In 1970 the numbers for the stock assessment are 4.36 million pounds; the Fish and Wildlife Service 2.8 million pounds. Now, why is this? The reason this happened is that the stock assessment only used the total weights. They didn't try to match this in the model with the numbers as well. The weights were converted to numbers; the assessment converted these into numbers at age by using a selectivity curve that is essentially flat.

In other words, it is saying that once a fish reached the age - and here is the curve that was used, and it looks like of about age two a hundred percent were available to the fishery, and this is over all ages after that. What the Fish and Wildlife Service data is saying is that this is not right; that there were more fish taken in the younger ages, younger than three, than later on in their life.

The selectivity curve that has been used in the model needs to be re-examined. This has to be done before I believe, in my opinion, before you can say that this is the best available science. What we need to remember is that if you look at the model output, it indicates that the production, the yield and abundance indices have all been level essentially for the last 25 years, and this implies that the stock is at equilibrium.

The question is where that equilibrium lies. You have a statutory requirement that it be at msy, and so where is it in relation to msy, and that's the question. But also the fact that the indices and the statistics have been level and that the output of the surplus production model, which was included as a separate model in the assessment, these too suggest that the fishing mortality level is sustainable at the current level and perhaps very close the - for this last year at least the production model has it at 1.07 essentially - the ratio of F to msy as 1.07 , so it is essentially not overfished. This is something that needs to be re-examined.

The one last note I want to make is that the model depends in part on interpreting what happens to the catches in terms of what is happening to the resource. And if there is no measure of effort to go along with the catches, when you have a drop in catch like happens after 1970, when you come down from a five or six million pound peak down to less than a million pounds, the model will interpret this as a drastic decline in abundance unless there is some indication that effort has dropped at the same time.

Since there are no effort inputs into the model reliably until about 1984 or later, ' 93 when the commercial index comes in, then the model itself has no way of really judging how well the change in the catches reflect changes in abundance, and this is a great concern with this kind of a model. Thank you very much.

Mr. Currin: Thank you, Dr. Hester, we appreciate again your being here. As you well know, many of the folks on this committee and on the council are not scientists; and that's why when Bob responded to the request to have you address the council that we asked you to come and address our SSC, which you did yesterday, and we appreciate you being here for that as well.

I only reminded you of the fact that many people around this table are not scientists to indicate the reason why we asked you to go to the SSC, and I understand that they did not have many questions of you. We were kind of looking forward to their response and assessment of the paper that you provided.

What I would like to do now is to just open it up to questions from the committee. John Carmichael from the council staff is here, and he is I think prepared to address some of your concerns at least if they're not addressed by members of the committee. Are there questions from committee members of Dr. Hester? Brian.

Dr. Cheuvront: Thank you, Dr. Hester, for your report. I realize that one of the criticisms that you have of the analysis was based on the early years of data that were interpolated from the three years of Fish and Wildlife data that were presented. My question to you is have you run any models pulling those years out? As I recall when I've asked the stock assessment scientists about this sort of thing, that they have explained it to me that typically those early years don't carry much weight in the final outcome of the model.

Dr. Hester: The modelers ran a sensitivity analysis that, for example, cut the earlier years by 50 percent or increased them by 150 percent. They also ran a sensitivity run using the original data workshop numbers, and they give varying differences depending on whether the catch is larger and the stock size goes up and msy goes up; if the smaller stock size goes down and msy goes down, and in general the fishing mortality rate will stay the same in any of these sensitivity tests.

What they have not done, however, is address the selectivity question, which is whether or not the large, old fish are sows that are missing and have been destroyed by the computer, but we think are still out there, whether or not the selectivity, if it were changed to reflect the changes in seasonal availability, area availability of this component, the spawning stock, whether that would affect the outcome of the model or not, and I think this has to be done.

I was given a paper prepared by the council staff this afternoon which addressed a number of my complaints - I don't want to call them complaints - concerns. I'm not complaining but I am concerned. It was a very well-done response, and it did, in terms of the question of the selectivity, does agree that this is something that should be addressed.

Whether it is going to make any difference or not, they don't know and neither do I, so it has to be done if we're going to find out. But in answer to your question, the Fish and Wildlife Service numbers are actually extreme. To put in five million or seven million pounds of catch with no idea of where it came from, whether it was possible or not, is an extreme sensitivity test at least, and some kind of adjustment has to be made to those early catches.

If they don't make any difference, then why do we go back to 1945? We go back to 1945 because we're trying to estimate carrying capacity, and 1945 is close to a virgin stock level, although according to the model it is 2-1/2 times the spawning stock biomass, msy, but, still, why bother with it if they don't make any difference? This has to be addressed.

Mr. Harris: Dr. Hester, thanks for being here. Can you look at these pictures of red snapper and tell me how old they are?

Dr. Hester: I have never seen a snapper in the Atlantic that was not on a dinner plate. We have red snappers where I live, but, no, I can't tell you. I have been talking to the guys about this, and I've been reading Dave Nelson has been collecting large fish here for the last month and having them aged. It is pretty apparent that you can't tell how old they are by their size. Some are quite young and quite large and some are quite old and quite small.

What I see is something from the Gulf where the world's record red snapper was aged at - I forget; it seemed like it was fairly young for its size, but it is not surprising that since fish essentially keep growing all their life, although they slow down when they get bigger, as long as there is good they grow; and if they get lots of food they grow fast; and if they don't get much food, they grow slow.

So you can have a small, old fish that had a deprived childhood or you can have a big fish that had a lot of care and so it got big. I've been in the aquaculture business raising ceriola amberjack, and we could raise amberjack up to spawning size in three years when in nature it takes twelve, but that is because you feed them. The size of fish makes it very difficult to tell.

The idea of having surplus production from a resource is based on part on the idea that if you reduce the numbers of fishing below carrying capacity, there is more resource available for them in terms of food and so they grow faster and so you can harvest more. You wouldn't be at all surprised to find that on the average the age at weight has decreased in recent time to reflect the fact that there are fewer red snappers than there were, say, back in 1945. That would be one thing you might expect although it would depend on where you are. Perhaps up off the Carolinas or Georgia it is quite a different situation than it is off Central Florida. Does that answer your question?

Mr. Geiger: Thank you for your presentation, Dr. Hester, very interesting. I guess my question however is for John Carmichael. John, I guess you're here representing staff and the questions concerning the differences or the concerns that Dr. Hester identified. My question is were sensitivity runs done utilizing both the dome-shape and flattop selectivity?

Mr. Carmichael: Not done at the time of the assessment workshop.
Mr. Geiger: Have they been done since?
Mr. Carmichael: They have been and it is something I was going to talk about whenever you're ready to go through some of this.

Mr. Geiger: And I guess the other question is in regard to the sensitivity runs concerning the early age data. Was the stock assessment run minus that early age data?

Mr. Carmichael: You mean the early recreational catch data?

Mr. Geiger: Yes.
Mr. Carmichael: They did look at that, yes, and that was one of the reasons the earlier runs using the linear interpolation starting at ' 82 which led them to look closer at that historical data to try and understand the age composition that they were seeing in the fishery.

Dr. Crabtree: I want to thank you, Dr. Hester, for being here, and we do appreciate your bringing these issues up and to our attention. Red snapper is an interesting fish. I've spent an awful lot of the last 15 years of my life dealing with it, mostly in the Gulf of Mexico, but it is a curious animal because it matures at a very young age, and then it lives to be 50 years old or so.

We've been doing assessments in the Gulf of Mexico for a long time now, going all the way back to years with Phil Goodyear and probably 20-plus years ago. One of the problems we've always had is estimating the productivity of the stock and what is msy. I guess when we did the Gulf of Mexico assessment a few years back, they actually tried to reconstruct the landing series going back a 125 years.

The reason they tried to do that, it was explained to me, was to try and get some estimate of the productivity of the stock because that has just been - it is very sensitive to what is going into it. I think the reason that they tried to pull in some of those early years and go back to 1945 was to get some indication of the productivity of the stock and try to estimate what msy is.

I don't know that any of us would argue they were very successful at that because of all the uncertainties with those early landings. As you pointed out, msy and all is very sensitive to the magnitude of those landings. The landings are higher, msy is higher, but it seems to me that the fishing mortality rate estimates throughout all these sensitive runs were pretty robust to the assumptions made in the catch-at-age model. Would you agree with that?

Dr. Hester: Yes, I agree that the fishing mortality estimates are fairly close. The ratios are variable. But what you said is very interesting in terms of going back 120 years, and I've always thought - because I did most of my work on the Pacific coast. I started out at the end of the Pacific sardine. I think the biologists that worked on the Pacific coast are more conscious of the fact that there is no such thing as " K ".

There are episodic periods when " K " is high, and there are episodic periods when " K " was just carrying capacity or low. With the Pacific sardine - in fact, Erik Williams yesterday made a very good remark when they were talking about " R ", the reproductive potential. He said that, yes, " $R$ " is something we're concerned about, but there is no guarantee that " $R$ " is going to respond the way we think it is, and this is the case.

So with the sardine, it disappeared when I was a kid in the 1950s. The Fish and Wildlife Service had a long program on it, have done extensive monitoring, and the best conclusions finally came out about 20 years after I was a kid based on the scale work that Andy Suter and John Isaacs did in the Anaerobic Basins off California where they could check the layers of the sediment for scales, and they could watch and count the years when sardines were abundant and anchovies were abundant, the mackerel were abundant and when they were not.

They found that there was a general trend for about a 30 -year period of abundance followed by a 30-year period of essentially disappearance. This was in the case of the sardines, a coastal pelagic fish, but it applies to - well, for example, I started out on the Atlantic coast in my work with bluefin tuna, and bluefin tuna, as most of you know, has been essentially flat for the Atlantic coast since 1980, '81, '82. No matter what you do, I don't care if you put a zero F on it, it is not going to spring back to some huge number; whereas, in the Mediterranean they've been taking 25,000 to 50,000 metric tons a year, and the biologists at ICCAT have been saying it's going to collapse. They have been doing that since 1982.

All the models say it is going to collapse, but it hasn't yet. It's going to, of course. It's not going to keep going, but when it collapses it's not probably because of some overfishing problem. It is probably going to collapse because of some problem with " R " and with the environment.

Dr. Crabtree: And we have seen some similar things to that in the Gulf of Mexico with red snapper because the recruitment estimates in the early part of the time series were at a fairly low level, and then at some point about 30 years ago the estimate of recruitments came up, and they've stayed high ever since. People have all sorts of ideas as to why that may be, but that is what the models estimate.

But, you know, I would agree with you that in the model it seems that the biomass estimates and productivity aren't very well estimated, and we've had all kinds of discussions about the stock recruitment curve and steepness and all that. In the end, it comes down, it sounds like to me that the selectivities are really the heart and the crux of the issue you have raised.

When I first read your report several weeks ago, that is what I took away was the issue over the selectivities, and that's something I raised I think back in December or so, because I was concerned about the flattop selectivities used in the model. It did seem more likely to me - or I would have expected dome-shape type selectivities. That is what, at least in the recreational fishery, was used in the Gulf of Mexico assessment.

And it is what you hear from the fishermen. I mean they will tell you the big fish are harder to catch, they're in deeper water, and those kinds of things, so that's kind of what you expect. When that issue came up, I'm in agreement with you that needs to be looked at and we need to get to the bottom of that.

I contacted Dr. Ponwith down at the Science Center when I provided them with your report and asked that they try to look at a sensitivity run that used dome-shaped selectivities, and I guess, John, you're going to talk some about that, because they apparently have just completed that analysis. I haven't even seen it, but maybe this would be a good time to hear about that, because that really does seem to be the big issue that is hanging out there.

Mr. Currin: And that would be the next move, Roy, unless there is another question for Dr. Hester from members of the committee at this time. If not, John, we'll turn it over to you and thanks very much for your putting together this analysis and summation for us today.

Mr. Carmichael: Part of the internal review process that goes along with the council is when something like this comes in is have staff to go through it and identify if there are issues that we essentially can't answer with the materials at hand or questions raised that haven't been addressed in the various reviews and documents that we have available and put it forth to something like the peer review for additional comment.

This would be bit of a filling in on opinions on this review and how we got to where we are now. Dr. Hester raised a number of issues about the data availability and is reiterating a number of the issues that were raised by the data workshop through the SEDAR in addressing this assessment such as the lack of fecundity, the issue that you don't have observations of M , and in fact this is going to be common to I would say every assessment you guys are going to see.

There aren't observations of M for wild marine stocks in very few cases, but the methods that they used to estimate from the data that are available are scientifically sound. It is true the data workshop attempted to provide the historical catch records as we just discussed, the important need for those to understand long-term productivity and to put where the stock is today in context of where the law requires the council to get the stock to.

They tried to extend that time series going back to 1945 after discussion about various appropriate years, and there was a lot opinion that after World War II a lot of the fisheries are believed to have been in a relatively low state of exploitation in the Atlantic, and that's a common year to use in the Atlantic assessments.

The Gulf red snapper was different. There is evidence of heavy exploitation even during the war years and back into the 1800's, which is documented in that assessment report. But what the data workshop put forward was a linear interpolation of that data, and they raised some questions about those historical reports, all of which Dr. Hester I think did a good job of reiterating.

There were questions also raised about the indices and the precision of the indices, and it is noted in Dr. Hester's report that there were nine indices considered; three that the data workshop actually forward with. The precision was questioned on the Headboat Index, but as those of you know around this table from seeing a number of these assessments, the Headboat Index provides one of the only long-term measures of abundance that we have for these populations.

We suffer greatly from the lack of comprehensive fishery-independent surveys in the South Atlantic Region. The precision is slightly low for that Headboat Index. It does have correlation that is high with the other indices and it provides that important long time series, but this issue is noted by the data workshop and again by the assessment and review.

It is not ideal but it basically came down to the last source of information they had available. Throughout there, there are concerns raised by all groups about the lack of adequate independent indices, and it becomes like a broken record. We've been through this on SEDARs all the time. Fishery-dependent indices are not the ideal way to go. They require an awful lot more assumptions than an independent index, but in this case we don't have the independent observations, and that's very unfortunate.

But I think overall through this and a number of other reviews, while, yes, we would like to have the data, we would love to have juvenile indices, we would love to have a long-term independent index that wasn't plagued by concerns about selectivity, but no new data are identified. There are a lot of issues that are reiterated but they are well addressed in the assessment report.

In the assessment workshop they used the catch-at-age model; that's right, they did not use the VPA. Both models are going to suffer from terminal uncertainties. It's inherent in a method that is tracking cohorts over time. The catch-at-age model used by the assessment workshop is a state of the art. It has been thoroughly reviewed by a number of independent review panels, and it is considered the most appropriate means to analyze the data, and especially to deal with data deficiencies that we're faced with.

One of the important reasons why the catch at age is preferable to the VPA is that the catch at age allows you to account for error in the catch sources. We're able to account for error in the recreational data, to allow different levels of error in the recreational data, in the MRFSS versus the headboat, and those two sources versus the commercial records, and to allow for differing levels of error going back in time.

Basically what that means is you can incorporate that historical data to give the model some signal, some idea of what the magnitude of landings might have been, but you're not forcing it to match that exactly. It would be much more difficult to do in the VPA framework. You would have to make a priori assumptions about what you think all that catch was and then within the model you treat it as exact.

So VPA certainly is something that has been considered, but what we have done through SEDAR is move more away VPA, and what that has allowed to do is to get assessments of a lot of species that haven't been assessed in the past because we're able to use model structure and other data to deal with some of the deficiencies that would arise from using the VPA framework.

Now, Dr. Hester raised a lot of interesting concerns about historical catches, and he did a great job of describing sort of what had happened there. The data workshop put forth a recommendation; the assessment workshop deviated from that. They looked at how the model was performing, and what they were recognizing was that the model was suggesting something had removed fish earlier in the time series.

Either fish were never born which was being reflected as very bad residual patterns in the estimates of recruitment or some something else had to happen to remove those fish and it was trying to drive the catches up. That is documented throughout the report when they discussed that. When they looked then back at the historical catch records in the Fish and Wildlife data and saw those high records, they thought, well, let's go and try some model runs where we just let that give a little more freedom to that historical catch.

As they did that, the model tended to want to drive those catches up; and the more it drove those catches up, the better the fits got to the model overall. So that led the group to say, well, then, maybe there is some reality in those historical catches, and that's why they decided to deviate from what the data workshop had said.

They also did a number of sensitivity runs of alternative approaches, looking at the short time series, looking at the long time series, trying different levels of that historical catch record. The table that shows the 20 -some sensitivities that are reported, the status conclusions are relatively insensitive.

One thing that is noted is that for the run with the very low historical recreational catches the current Fs are amongst the highest in the time series, and the potential msy is amongst the lowest. So what we discussed at the assessment workshop is that one of the realities is that to start with a very short time series and not try to account for what is apparently potentially high recreational catches in the past, you would be essentially saying there is virtually little yield that ever be taken from this population. The people just really had a hard time accepting that in light of a stock with the age potential of this fish and the size that these fish can reach.

But what to me this pointed out, especially the work that Dr. Hester did, is compare the average mean weights between what the Fish and Wildlife showed in those years and what the model was estimating by being able to go back and back-calculate that. When I was intrigued by that I guess as Roy was about the same time, and to me it said the same thing; that I think there is a selectivity issue there in that it would make sense to me that instituting a dome-shaped selectivity would bring those average weights more in line with each other.

I think that is a real legitimate issue that's worthy of consideration. I looked into the assessment report and looked back at various other records and tried to get my own personal notes and to see what was discussed. I couldn't tell that a dome-shaped selectivity option had ever been formally evaluated during the assessment workshop.

Therefore, we felt at the staff level that consideration of a dome-shaped sensitivity run would be in order because of the - and keep in mind this is coming up after the issue had been raised at a previous meeting, as Roy noted, and knowing that is what was used in the Gulf Red Snapper Assessment, as well as the anecdotal information about some of these larger fish being more difficult to land within the recreational fishery, we believed it made sense to run that type of run.

What I understand where we stand on this run is that the Science Center analysts who worked on this assessment are currently conducting sensitivity analyses looking at dome-shaped selectivity. They're considering several shapes for the dome because this is kind of one of the challenges is that you don't just say, okay, it's a dome; you have to specify, well, what is the shape of that dome; how much fishing mortality does a 20-year-old red snapper receive, what proportion of the total does it receive?

We know it's not zero because those fish do show up in the catches. We know that it's going to increase through the size limit and at some point it's going to tail off. What they're doing is considering several shapes for the dome. They're working on the final report now. It is not yet available. It's pending the internal review and Data Quality Act Review to make sure it's meeting all applicable standards.

The preliminary reports are that defining the model is relatively insensitive to changes in the selectivity pattern and it's not having a big impact on the status of where you are today. I think
that's kind of part of the issue here. In Dr. Hester's report it is kind of the concluding statement that, well, the assessment is incomplete and the status is unknown.

Overall, just looking at what is in the report, the assessment workshop, the independent peer review panel, they certainly don't support the idea that it is an incomplete assessment. I think if you look at their discussions, it is pretty obvious that there is uncertainty in the benchmarks. If you look at the sensitivities you can see that the status estimates are very robust to all the things considered, and it's a wide range of options that are considered.

The stock is overfished and overfishing is occurring is a pretty strongly supported conclusion. The question, as Dr. Hester notes, is how does that compare to the ultimate benchmark that the council is trying to achieve? The question that is posed is, well, is the stock sustainable at where it is now? That is an interesting question, as well, because when we first presented this assessment to the council, there was discussion that, well, you guys are saying this stock is - I forget what we used and Susan Shipman might because she commented on it.

It was about sustainably depleted or there was some phrase that was used when we were describing this.

Ms. Shipman: Stable collapse.
Mr. Carmichael: Stable collapse; that's what it was, because the stock is chunking along at this low abundance, and it keeps putting out good year classes on occasion, and that does cause some concern. It's like, well, how can that be? I think part of that is the stock is very resilient. One of the review panel discussions centered around the somewhat illogical observation that a fish that can live to be over 50 years is maturing at age one in some cases and most all of them mature by age three.

Their discussion about that was not, well, how is this all wrong? They said, well, maybe this has simply been the population's response to 30 years of sustained over-exploitation. They think the fish has just responded to this, so, yes, it's cranking out year classes on occasion, but the level that it's at is not anywhere near the level that it could be.

I think the bottom line to the council is that overfishing is not determined by whether or not the stock is going to go away tomorrow or it's endangered or it's in danger of being endangered, but it's determined by the rate of exploitation today relative to what the benchmarks are, and there are uncertainties in the benchmarks.

We have had a lot of discussion about whether it's 40 percent or 30 percent. Look no farther than the fact that we're having that discussion and not using an estimate of msy from the assessment; so that is agreed, the benchmarks are extremely uncertain. That's why you're having a lot of the discussion you are.

But even if the current exploitation were considered sustainable, as argued, I think you have to acknowledge that considerable yield is being sacrificed. There is a lot of overfishing going on. Certainly there is growth overfishing. Maybe you can argue that you're not in jeopardy of
recruitment overfishing because your current size limit is protecting some fish and allowing them to spawn, but is this all you ever want to get out of this population is what you see right now?

I think throughout all of this, if you read the reports in every SEDAR, additional monitoring is needed. Dr. Hester points out a number of things that are worthy of additional ways of monitoring, and further evaluation of historical catches is one of the things that's at the forefront. At the SEDAR Steering Committee, about a month ago, we discussed the need to have a future SEDAR Future Procedures Workshop devoted to that.

Because we are in such a data-poor situation in this region, getting some idea of the historical catches is very important to refining this overall question about productivity. We really need to get into that and we're recognizing that different groups of scientists reach different conclusions. We need to settle that issue once and for all.

A question that was posed somewhat to the SSC is sort of why is the model so robust? My thoughts on this is I think there is an overwhelming signal in the data somewhere if the model is being very robust. For me that signal is really the declining cohort abundance over time and is supported by the recent intensive sampling that we have seen otoliths.

There is a huge decline in numbers at age. Any fisheries’ model, because they rely on essentially counting the fish that are being removed, they are going to be robust when exploitation is high, and in this case exploitation seems to be very high. They're also going to be very robust when the exploitation is very high relative to M .

If M is around $0.1,0.05$, and we're looking at Fs over 1 , well, changing M by 50 percent in a way isn't going to have a big sensitivity on the model. Now, if we were in a case where exploitation was much lower, F and M were much closer, then you would see that this model may not be quite so robust.

I think those of you with experience and seen fisheries going from very high exploitations to very low exploitations will know this very well. As that population starts to recover and the exploitation is down, suddenly that model seems to be real prone to swings, and a new year coming in or a new source of data, some additional information because you're not removing them as fast, there's not as much strong signal coming in to your data set, but when you're removing them very quickly, they are going to be robust. I think that's the bottom-line answer for that. That's our take on the situation.

Mr. Currin: Thank you, John, very much for the time involved in putting that together and presenting it to us today. We appreciate it very much. Roy.

Dr. Crabtree: I think that was an excellent summary, John. I agree with you, it is almost surprising how robust it is to just huge differences in assumptions. I think the key signal that's coming through is the decline in the abundance of those cohorts. It is not the 15 -year-old fish and the old fish. It is getting the F estimates from you've got this many two year olds, three year olds, four year olds, five year olds, six year olds and it's that.

It's not those old fish driving it. It's that decline in abundance probably before any of them are ten years old that is really driving the outcome. You can switch to a dome-shaped selectivity which says those old fish aren't as vulnerable to the fishery, but those three-, four-, five-, six-year-old fish are vulnerable to the fishery, and they're probably fully selected and we're seeing a sharp drop off in abundance at those ages.

So even if it's dome-shaped selectivity, it's probably not going to make that much of a difference, but I'll look forward to seeing those sensitivity runs because I have not seen them myself, and we'll look at them. It may show that there are more old fish out there. I don't think any of us here would tell you that the numbers of fish at age, that we have a good estimate of how many ten year olds, how many fifteen year olds, how many twenty-year-old fish are there out there; we don't.

Those numbers in that assessment are extremely uncertain; and as you get to older year classes and ages, they become even more uncertain, but we do seem to have a pretty good estimate of the fishing mortality rates, and they're very high. That's kind of my take on what is going on with it.

Mr. Robson: I have got a question regarding the age information that we do have. It was kind of my understanding that for this particular stock we actually had a fairly large data set of actual aged fish based on otoliths, and that helps define what the age structure really looks like. I guess there was even a more recent effort to look at otoliths. Can you characterize what that age based on otolith data, how confident are we in how the age structure looks and particularly as it compares to this new batch of information that we looked at from otoliths?

Mr. Carmichael: We have decent sampling coming on, as we do in a lot of our fisheries, starting in the late nineties to 2000s with a noticeable increase in the sampling. Our most recent years have pretty good age sampling. We also know, as Roy noted, a lot of these fish are getting removed at a relatively young age, so we have some cohorts that have moved through to where they're virtually gone with decent age sampling.

What I note, in looking at some of the preliminary work from efforts that have gone in Florida and Georgia to collect a bunch of red snapper, is that the preliminary estimates for that, the bulk of those fish were coming in at age four. It indicates a very strong year class out there. That's completely fitting with what we discussed when we talked about the most recent projections of this stock.

We discussed the fact that the recreational catch had gone up greatly in 2008 and that the MRFSS estimates of discards had gone up greatly in 2007. That points to a group of fish coming into this fishery; and I expect if we had otoliths from last year that were being worked up whereas now they're working up these, we probably would have seen a fair number of three-year-old fish showing up in the catches last year.

What struck me, though, most of all in those otoliths was, first of all, there was 121 age four but only six of age five and only three of age six. I don't think I'm out of line to put some of this
information up here. When I saw that, it really caught my interest looking at this - this is just the preliminary stuff that came in.

Now there is a bigger data set with I think closer to 300 fish, which I haven't looked at, but you can see this 121, so that's a good year class that is clearly out there; fewer threes, which the threes aren't necessarily as exploited. They're not necessarily fully recruited in some cases. It's hard to tell at this point with a three year old whether or not that's not as good of a year class or whether they're just not coming on yet. We won't know until they get to age four.

But what really struck me was the jump between age 11 and age 19. I really expected to see more sort of spreading out. I was really interested; are there any age classes that are missing, which was one of the things we were talking about in red drum and trying to gauge that recovery is, okay, we've got some age samples of these old fish, but are there any cohorts that are missing completely?

I noticed those cohorts were missing, so I looked back at the assessment estimates from the terminal year to see what the abundance was of those cohorts when they were age one. What I noticed was there is a string of bad year classes that were estimated by the model really from, say, 1991 through the 1996 cohorts where their abundance is extremely low.

Interestingly enough, those were largely the ones that did not appear in those samples at all. The 19 year old that showed up as the oldest one, there was actually 32.5 estimated for that, and I think these were in thousands perhaps or millions. I don't remember the exact scale. But, really, it is the relative - there's less than 0.6 here, you didn't see any in the sample, but 32.5 here we see one in the sample. The other thing we have to look at is how did we not know this year class was coming?

Well, the nature of these beasts in these assessments is you're working backwards in these cohorts, so this big year class that we're seeing right now at age four, the only time we got to see it was one time in our assessment with the terminal year at 2006, we haven't seen much information on this fish; so these last couple of estimates of recruitment here of age one N , they're really dependent just on the stock-recruitment relationship, because we haven't seen those fish.

It's not until a particular cohort reaches age four and is fully recruited to the fishery that we really start to get a good estimate of how many there were out there. These fish in 2009 that are age four that were born in 2005, we had an estimate of them - you know, one estimate of them when they were age one.

Well, as Dr. Hester pointed out, we don't have the juvenile surveys. We're solely dependent on just expecting that year class to be average because we don't have virtually any observations of those fish, so we have a pretty good lag in seeing that good year class come through. When we first presented this assessment, the concern was, well, is there another good year class coming through because we focused a lot on those '98 and '99 year classes where they were estimated, you know, in four and five. And I think, lo and behold, we do have a good one.

It's coming through now and it's probably going to make those look - put that '98 and '99 situation to shame with the size of it. Clearly, it is good, but this is all purely abundance. It doesn't reflect the exploitation rate, and there is really nothing going on that would bring the exploitation rate down, so you're still dealing with the situation of addressing the overfishing.

I think the current otolith samples really do, by this big string and not seeing any fish, really kind of validates what was going on back there and that you really did have a run of very bad year classes. Things are getting better now. They're getting better for the size limit. It's just a matter of relative to where you need to be and relative to where the overfishing status is concerned it is not good enough. You've got to do more.

Mr. Harris: John, about a year ago at the meeting in Florida it appeared to me at that time - and I asked the SSC this question - all the fish that the fishermen were seeing, which we all agreed with, all the information we had agreed with what the fishermen were seeing were the result perhaps of '98, '99 and 2000 year classes.

Now it appears, based on the most recent sampling that has been done in Georgia, that those year classes are essentially gone from the fishery and what they're seeing now is the result of a more recent strong year class or year classes; is that true, is that what you would say?

Mr. Carmichael: Yes, I would say that's true. It would appear that the '98 year class, which is reaching age 11, you saw one. I looked back at the catch at age and the abundance estimates in the assessment for that year class, as we did that, and noticed that year class dropped out once it reached the age four where it starts really getting fully recruited. It dropped out at about 50 percent a year. By this time it is not surprising that it's gone because it was on its way out in '06.

Mr. O’Shea: John, last night during the comments there seemed to be a theme with some folks, and it was partly repeated today, about if a stock is in equilibrium, therefore, it must be at its optimum or maximum abundance. How can you make that conclusion?

Mr. Carmichael: Well, I think the reality is a population can reach a lot of points of equilibrium, and the goal of the council is to reach a point of equilibrium where your biomass is above the biomass that gives the sustainable yield and essentially balances growth and recruitment overfishing.

I think I would point to the scientists in the room a recent paper that has appeared in the Journal of the American Fisheries Society, their monthly magazine "Fisheries" with Carl Walters. He calls on about 12 case studies where fisheries management hasn't always worked out like it should. One of the ones that I was looking at was cod in the northeast. He brings up the discussions that had been up there about that population potentially being at a different point of equilibrium.

He brings up some other stocks where the equilibrium point seemed to be going up higher and higher and higher. I think, yes, the red snapper population may be at this point of equilibrium where it's getting a good year class often enough to keep some fish out there, and the size limit is
protecting enough of those young fish to keep some spawners out there even in years when there is not a good year class despite the high exploitation.

But in terms of where statutorily you have to be and I think where you'd want to be from a conservation point in terms of not always being dependent upon this incoming recruitment, it is not a good equilibrium point. Another classic sign of an overexploited fishery is this sort of boom-and-bust cycle where you're totally dependent on incoming recruitment, and that really seems to be what is going on with red snapper. We can argue the magnitude, but clearly that's the situation that's going on. All the data that we have point to that.

Dr. Crabtree: So it appears to me we’ve got a couple of things that we need to address before we put any regulations in place. One is we need to follow up on Dr. Hester's issue with the selectivity, which sounds like folks are working on that, and that we should have that by the next council meeting. I would guess we're going to have those analyses quite a bit before then, so we need to take a look at that.

Then the second issue we need to deal with is we do have a strong year class that has hit the fishery, and that is clear from the ages that have come from the fishermen who provided otoliths to us. I think we're all in agreement with that. It is quite possible that the abundance of the age three- and four-year-old fish out there right now is several times higher than what our projections are using because they don't reflect that big year class.

It is quite possible that there are a lot more fish out there now than what is in our projections. Now, the bad news is that doesn't mean the fishery mortality rates have come down any, and there is really not much reason to think that has happened. We need to take a look at, in our projections in the Center - this is another issue that the Center has worked on and I think have provided us now with some projections. What they did is they went back and looked at when was one of the last strongest year class we have ever seen in the fishery and what if that is happening again; what if it is even bigger than that and what does that mean?

We need to take a look at that, John, because one of my concerns is we're going to put some sort of discard target in place where we're going to want to see discards come down by some amount, but if the abundance of the fish out there is much higher than we think, we're going to underestimate how many discards are going to take place; and then when we see more discards, we're going to say, well, that's because management is not working.

Well, I don't think that's the case. I think it's because there are more fish out there than we think, and so I think we need to figure out how to take what the Center has done with these new projections and how does that affect the annual catch limit estimates in terms of total removals that are acceptable because I suspect it is going to raise them quite a bit.

I think those are the key things that we need to look at right now and see those results before we're going to be able to come to resolution on this. Again, I want to thank you, Dr. Hester. I think the selectivity issue you raised is an important one, and that's one we fully intend to explore.

Mr. Currin: I'm sorry Erik wasn't here because I asked him specifically about the selectivity and whether he and Kyle, in running the model or developing the model, had run different selectivity indices. His answer was in fact they had. They didn't do an exhaustive exploration of that at all, but they chose to use the flattop because there was not much apparent difference in the domeshape and the flattop selectivity for those preliminary sensitivity runs. I think it’s important that we go through the exercise and run more of those. I'm glad the Center is doing that now and we look forward to viewing the results of that.

Mr. Harris: The reason I asked the question about looking at the pictures and can you tell the age of a red snapper by looking at the pictures is because there have been a lot of fishermen that have been supplying the council with a lot of pictures, and I didn't want the fishermen to have the wrong idea.

What we have been telling the fishermen all along is you cannot look at a red snapper and tell what age it is. I think that came out very clearly with the ages of the red snappers that have been collected recently in Georgia. I mean these are primarily three- and four-year-old fish, but they're all over the spectrum as far as the size that they are. I think it's important to understand that you can provide us all the pictures you want, I love to look at the pictures, but that doesn't tell us a whole lot with respect to what the age structure of the population is. Thank you.

Mr. Wallace: This question was more to Susan about the report.
Mr. Currin: Well, let's just make sure that everybody has had the opportunity to ask Dr. Hester questions, and then we can allow him to excuse himself and finally get home. You've been waiting for several days, I guess, to have this opportunity. We're glad you stuck around and we appreciate it very much and thank you for your interest in the problems that we all face.

Dr. Hester: Well, we certainly appreciate your hospitality and allowing us to make our presentation. I know you have a very full agenda and time is worth a lot. Thank you.

Mr. Currin: Thank you, and it's not unusual that the Snapper Grouper Committee is far behind, but we're starting out far behind today and that is unusual.

Mr. Wallace: Based on this report that was sent in on these aged fish, what was the area, I guess? How many square mile area were these fish taken out of; what depth range?

Mr. Shipman: They were taken by headboat operations and charterboat operations that were operating out of Lazaretto Creek Marina. The day that I was helping to collect, the depth was the Savannah Snapper Banks. I think one of the fishermen said it was like 105, 95, 85 . We've got the depths.

They interviewed the captains after every trip so we've got those. I don't have them on here. We can certainly provide that to you. It's where they normally fish. We were sampling their regular routine trips for where they would fish.

Mr. Wallace: So these fish were all taken out of one general area; they didn't expand the -

Ms. Shipman: Off of Savannah.
Mr. Wallace: -- range to different depths and different areas that may have been more commercialized?

Ms. Shipman: No, these were not commercial people. They were for-hire trips, but they were fishing I think where they normally fish, and it would have been in areas off of Savannah.

Mr. Wallace: Which would have been within a ten-mile range basically?
Ms. Shipman: That I couldn't tell you.
Mr. Harris: Well, remember, this is typical of what a one-day trip on a charterboat or headboat would be so they're not going 60 or 70 miles offshore of the coast of Georgia. They're going to stay at that snapper bank area, which is essentially 35 or 40 miles out from Savannah.

Mr. Currin: For those folks in the public who have not had an opportunity to look at those age data, I'd encourage you to get a copy of it. It is very informative and illustrates I think very well the point that Duane made that you can't tell how old the fish is by how big it is. There are real interesting comparisons there that you can observe. Mark, real quickly.

Mr. Robson: I want to say, Susan, weren't there some additional otoliths collected in Florida as well?

Ms. Shipman: I cannot speak to the Florida collections at all. I can only speak to the 352 that we collected. The two labs were doing some validation of the aging and the agreement was very high, within the 90 percent. Our folks were doing some aging of the Florida fish but I really can't speak to those.

Mr. Robson: Yes, I think there were areas in Florida that were also collected from, and that was part of that joint effort between the two states.

Mr. Currin: Yes, Mark, the data I saw from Florida, they were obviously selecting large fish because they were all 29 inches plus, I think.

Dr. Crabtree: Yes, I think it was somewhere around 15 or 20 fish from Florida that were provided. None of us are going to argue this is a representative sample. I think most of these fish came from a handful of people. I think all of the Florida fish may have come from one person. It is a snapshot to kind of see what these guys were catching, but I don't think anyone would argue it's necessarily a representative sample of the whole fishery.

Ms. Shipman: I would just call your attention to the second page on that data sheet. That's got the metadata and that may answer some of your questions. I didn't realize it was on there. I think they sent it out a second time with the metadata, so I call that to your attention.

Mr. Currin: Yes, I think I've received it four times, which is good. All right, anything else? Kim is here to provide an update on outreach efforts for Oculina monitoring.

Ms. Iverson: I do want to update the committee on the Oculina outreach efforts. I think most everyone has had an opportunity to visit the Oculina display that's outside. We took delivery on that last Thursday, right before we came here for the meeting. It has been an effort that has taken about two months to get that display put together with input from advisory panels from our Coral and Information and Education Advisory Panel, as well as our I\&E Committee members.

I appreciate their input and suggestions. We also had input from the various states and other people associated with the project. There is a DVD player that is associated with the exhibit. I think you have had a chance to see that it does have a loop for the "Revealing the Deep" DVD, and we can modify that.

We can, of course, use different videos and modify the display accordingly, especially the kiosk there for the DVD player. This project was funded through the Coral Reef Conservation Program and is part of our outreach efforts identified initially in the Oculina Evaluation Plan, the outreach components.

Because we have just taken delivery on it, I have been informally in contact with Laura Dedrick - she is the education coordinator with the Smithsonian Marine Station down in Fort Pierce - to let her know that we have taken delivery on it. She had reviewed it and been part of that review team that had input on the initial layout.

She has a ListServe that she is going to advertise the availability of the display. It is intended to be on loan. It is intended to go out and be a part of educational workshops, boat shows, trade shows. We are really trying to get it out there. Because we have taken delivery on it just recently, I'm going to put a more formal e-mail announcement out to the teachers and educators that have attended our Deepwater Coral Workshops in the past, through the Marine Station, also through Lundy Spence with COSEE, Center for Ocean Sciences Education Excellence.

That's through the Sea Grant Program. They're located there in Charleston. I have been in contact with Lundy last week to let her know. She is also going to put it on their ListServe. The intent is to get it not necessarily out of the council office all the time, and we will have it at our Florida meetings as it's available.

We also want to get it out to the public and have that information available. I'm open for suggestions from the council members as well. I think most everyone has had an opportunity, also, to see our new regulations’ brochure for the Deepwater MPAs. They came in on Thursday as well, lots of boxes. We have 10,040 copies delivered to the office. I just wanted to point out that in addition to the Deepwater MPAs we do have a page on the Oculina Bank and on the Experimental Closed Area, understanding that is not part of the MPA series, but also that it was the first Deepwater MPA or protected area - not MPA but protected area.

There is that page in there and we have that as part of the display as well as the Oculina Bank Regulation Brochure. We have also updated the Deepwater Corals Handout. It is a single-page
handout highlighting the council's work with the development of Deepwater Coral HAPCs. This will be available as part of the distribution with the display.

I hope that you've had an opportunity, also, to pick up a copy of this Coastal Heritage. It is the winter issue put out by South Carolina Sea Grant. The whole entire issue is devoted to what they referred to as Coldwater Corals, but John Tibbetts with South Carolina Sea Grant wrote this article and Myra Brouwer and I worked closely with John in the development of this issue.

There are also references to our advisory panel members. Randy Manchester from the Golden Crab AP is in there as well as Marilyn Solorzano from the Deepwater Shrimp A. If you haven't had a chance to pick this up, I think you'll find it of interest. We are continuing to distribute the "Revealing the Deep" DVDs and the brochures as requested. We brought a lot of those DVDs to this meeting and they have been going quickly. I think this display will help facilitate the distribution of the DVDs and the brochures as well. Mr. Chairman, that concludes my report.

Mr. Currin: Thank you, Kim, very much, and our new display is very impressive. All it needs is a 40 -inch screen on it now to attract a lot of attention. Questions or comments for Kim?

Mr. Iarocci: Thank you, Kim. I think it is very well put together. George, are you content with the way this came out with the Oculina display.

Mr. Geiger: Absolutely perfect and I already expressed that to Kim and commended her for a job extremely well done.

Mr. Currin: Other comments or questions for Kim?
Ms. Iverson: One more quick note. I just want to let everyone know that we are going to dropship these regulation brochures out to the state and federal agencies, our law enforcement officers and things that normally receive our regulations and brochures. If you have some other needs, let me know because we do have boxes in the office and we will be shipping those out. I'm also going to be working on our other regulation brochures for all species managed by the council.

Mr. Currin: All right, thank you, Kim, very much. All right, Myra is here to provide us with an update on research and monitoring.

Ms. Brouwer: What I have prepared and is in your briefing book is something to satisfy George's request at the last council meeting to provide basically an overview of recent research that has taken place in the Oculina Bank. What you have in your briefing book is a listing of recent publications. What I did was go through the Oculina Evaluation Plan and provide a status of the various tasks and objectives in that plan. I don't want to go through the whole thing, but one of the main things that has happened lately is the Cooperative Institute Proposal has been approved and will be funded.

There are a lot of projects and a lot of activities in that proposal that will address many of the objectives in the Oculina Evaluation Plan. As you go through the document, you will see some
activities have not begun yet. There is no funding now or in the foreseeable future to complete some of the things that are in that plan, so I have listed those as well. If there are any questions, I'm just going to leave it at that.

Mr. Currin: That's Attachment 2 in your Briefing Book under Snapper Grouper, I believe. Questions for Myra about research efforts and the status of various projects and the like? I see none; thank you, Myra, very much, and thanks for putting that together and gathering it into one place. All right, we're pleased to welcome our SSC chairperson, Carolyn Belcher, to give us a report on this meeting to date.

Dr. Belcher: Basically, what I'm going to present for you is what we've done relative to Amendment 17 specifically. We had worked on finalizing the ABC Control Rule that we've been developing as a generic framework to help you establish ACLs. We were actually able to finalize that, and we were able to apply it to species that are identified under Amendment 17.

We also discussed its application relative to weakfish and the golden crab fisheries. For those species that were in a table that we had yet to fill the numbers in for; specifically, gag and vermilion, we have come up with ABC values. What I'm going to give you are the 2010 numbers.

For gag the ABC that we developed comes out to 805,000 pounds for landings with 18,000 in terms of numbers of dead discards. This corresponds to a P-star value of 0.30 , which is that probability of overfishing over the time period for the projection. I can go in detail tomorrow with how the ABC Control Rule actually is laid out and how it will work. I just didn't feel you wanted to see that detail at this point. Basically, again, this corresponds with a 30 percent chance that overfishing will occur during that time period.

For the vermilion snapper the ABC level that will be developed for 2010 is 1,109,000 pounds, which is inclusive of landings and discards. This value was interpolated from tables that were provided in the vermilion assessment. Basically the value that we came up with for P-star corresponded with a $27-1 / 2$ percent chance of overfishing. The tables did not correspond specifically to that value, but we did have P-star estimates for 0.3 and 0.25 so we just basically took the average between those two values to come up with those landings.

We recommended waiting for the results of the stock assessments for both the black and red grouper to determine those ABC values. We did not provide an ABC for golden tilefish because of the age of the assessment and the lack of a current estimate of abundance.

Relative to this we have requested that the council ask the Science Center to provide estimates of OFL and the associated uncertainty in the case of tilefish, wreckfish, golden crab and all other assessed stocks except those already addressed in 17. This would consist of projections from the last assessment based on known landings projected to the current year and through the next assessment based on a P-star value, which we're asking for a range of P-stars because until we run the ABC Control Rule we really don't know what that probability is going to be.

We needed a value range between 15 and 35 percent probabilities basically and 5 percent intervals. The tables are similar to tables that have appeared in the vermilion snapper assessment. For the unassessed stocks the SSC is requesting the council ask the Science Center to apply best available science and provide estimates of OFL and the associated uncertainty through the year of 2015.

It is strongly recommended that these estimates be developed through a peer-reviewed process. The SSC also requests that the report summarizing the results include a detailed description of the methodology used to calculate the estimates and its uncertainty. Additional information that we're going to need is also relative to PSAs, which is actually the productivity and susceptibility analyses.

That is one portion of what we're looking at under the control rule. It measures the fish's resiliency to fishing based on life history parameters and some of the dynamics associated with the animal. The MRAG Group has produced an approach which has been incorporated into our model or the ABC Control Rule, and for certain species we don't have those values so we actually need them to be calculated.

Relative to Amendment 17 itself, aside from providing those values, we did receive an update on Amendment 17 and the timeline. At the council's request we did discuss the use of the SPR 40 percent reference point as a proxy for establishing Fmsy. The discussion basically focused around some of the current literature that's establishing the precedent for moving towards this use, especially when working with long-lived species.

After a pretty lengthy discussion, we decided against recommending a default proxy for Fmsy. The SSC indicated the appropriate level should be determined on a case-by-case basis. Again, relative to the discussions that we had in December with the issues of steepness and some other generalized discussions that we had, we felt this was more appropriate.

We heard numerous presentations about how to assess the current impacts for the closures; also looking at the socio-economic reports that Jim Waters and his folks have done. Most of the comments from the SSC centered on how to treat changes in the spatial distribution of effort as a result of the closures.

Most of these models assume once that effort is pushed out, it's lost, and we know that some of that effort will just be relocated to other areas, and that has not been addressed in the models. Overall, the SSC felt the methods appeared sound and the presenters were thanked for all the work that they've done.

Erik Williams presented a report discussing two options for monitoring red snapper in the event of a closure. Given the proposed regulations, obviously we won't be able to keep on with the catch stream to determine what the population is actually doing. There was a discussion about what type of monitoring plan should be looked at. Two options that Erik's crew had looked at was an expansion of the fishery-independent programs, which would be a combination of MARMAP and a new sampling survey by the NOAA Lab from Beaufort and also the continuation of the Headboat Sampling Program.

Given issues with the Headboat Sampling Program such as high mortality, a potential change in behavior of fishers, Dr. Williams recommended that the expanded fishery-independent program may actually be the better way to go, and the SSC agreed with that conclusion. We had also received Dr. Hester's presentation to the SSC. Unfortunately, we had no discussion or comments at that time for Dr. Hester. That summarizes all of our discussions relative to Amendment 17 and the associated actions.

Mr. Currin: Questions for Carolyn? I have got Mark and then Susan.
Mr. Robson: Carolyn, I just wanted to get clear on you were talking about the reference point. Were you talking specifically about red snapper or about all of the - how did you discuss that?

Dr. Belcher: The question posed to us was to see about the overreaching use, which our assumption was that you were asking if we were going to default from an SPR of 30 percent to an SPR of 40 percent. We did not recommend a default value. We felt that it needed to be addressed on a case-by-case basis within the assessment.

Mr. Robson: For all snapper grouper species; when you said for the default, you're saying - did you want to try to -

Dr. Belcher: Sorry, across the board of any of the assessments that we would have come to us. Red snapper just happened to be the example I think that brought the point forward because there was that shift from the normal of SPR 30 percent to the SPR of 40 .

Mr. Robson: But the SSC did not change any recommendation relative to using 40 percent as the proxy for msy for red snapper?

Dr. Belcher: No.
Ms. Shipman: Carolyn, I can't recall and you may have said - you mentioned vermilion, the ABC estimate of 1.109 million. Did you say that included dead discards or not?

Dr. Belcher: That was discards included; that was total.
Mr. Robson: I had another question on the comment about how to address the closures. Was that in relation to the closures coming from Amendment 16 as it might affect red snapper, because those are seasonal closures that you wouldn't expect effort to be pushed anywhere else?

Dr. Belcher: The paragraph that I was reading was unfortunately a broad summary of two levels of analyses that were brought to us. Dr. Waters had two presentations out of his lab relative to the socio-economic effects that looked at the cumulative effects of 16 and 17, and basically just showed us those impacts to the operators and net revenues.

In that particular one again our general comment was the fact that it was assuming zero distribution of effort; that whatever came into play, that effort was not accounted for. Unfortunately, I don't think this paragraph captures all of what the generalized discussion was,
but it was an issue of redistribution of effort. It was assuming that all of those trips that would respond to those management changes would be completely dropped out as opposed to having them change fishing practices or focuses.

So it's more of a maximum impact than an actual adjusted impact for potential behavior shifts within the fisheries as well. Then the other presentations we received, there was actually I think four that were all - actually five because John Carmichael presented to us and Nick Farmer and Andy Strelcheck from NOAA, the effects of the closures, the area closures, and that was the same comment that we had for that; that the methodology is sound, but there still just isn't enough sensitivity to see what happens if you have a redistribution of effort.

Mr. Currin: Other questions for Carolyn? Carolyn, I have one regarding the monitoring program, and I think you said your recommendation followed Erik's - that the fisheryindependent program probably would provide the best monitoring program. Was that in respect solely to red snapper and the discussions solely surrounding efforts to monitor red snapper?

Dr. Belcher: Yes, that's correct.
Mr. Currin: Yes, I had this conversation with Erik before the meeting because there is a lot of inherent value in the headboat survey to a large number of other species. When you start talking about that closed area that we're considering off of Florida and Georgia, that's where all the red snapper happen so you rely heavily - or that's where most of the activity and catch occurs, so you rely heavily on that effort in that one particular area regarding red snapper monitoring.

However, for other species it's spread out more uniformly along the coast. I don't know where I'm going with this except to say that I hope we can get a little better assessment of the overall value of that headboat survey for all the species; you know, not just exclusively considering red snapper that is going to be affected.

Dr. Belcher: A lot of our discussion basically focused around - Erik's concern was as they started to modify or work with the headboat fleet as is to turn it into a monitoring program, that the more we worked around trying to get it to account for a proper number of trips, season, areas and so on and so forth, you would start modifying the fishery behavior and as such you would alter the headboat index itself.

In order to really continue to carry it on with that signal that it is giving, the cost involved in it and basically what makes it kind of preemptive, and if you were going to spend the amount of money in modifying to keep that survey going, you would almost be better suited to start pursuing a fishery-independent survey. That was kind of what his logic and where our discussions were coming from.

Mr. Currin: Or either pursue a new one or enhance some existing one, yes.
Dr. Belcher: Correct.

Dr. Cheuvront: I wanted to follow up on that. Was there any discussion of the probability that they thought - you know, if you go after the headboat survey - and I understand Erik's concerns - you're going to get a lot more fish I would think than if you went to an independent type of index for the red snapper. Was there any discussion of would you be able to get enough fish in an independent survey to make the investment worthwhile?

My concern is that if you stick with something like MARMAP or something like that, you don't get that many red snapper in MARMAP, so where are you going to get these fish? Then when we look at the difference in the cost, I mean - I see Erik's concern of going on the headboat, but there is also a concern going after an independent assessment as well.

One way or the other you've got to have the data, and I'd hate to see us get into a situation where we've backed off doing a headboat survey hoping to do an independent type survey and then end up with nothing several years down the road.

Mr. Boyles: Mr. Chairman, I appreciate the discussion here. Just so you all know, the MARMAP staff has provided some information to the Center staff that we are planning to add sampling stations to the MARMAP Program. The current cruise season to target red snapper, the staff has scheduled 90 sea days. I have described to this council before the difficulty in deploying that crew on aging facilities, but we are doing everything we know how to do to help get that data.

Mr. Cupka: Mr. Chairman, that was pretty much the comment I was going to make. My understanding is that the expansion of the MARMAP sampling was going to be - the add-on was going to target red snapper to try and avoid the concern that you had, Brian, if I understand correctly.

Dr. Ponwith: To that point, that is an excellent point that the aerial coverage, the sampling rate and the gears that we're using in MARMAP need to be looked at very carefully before we put all our eggs in that basket. One of the things that was brought up in Erik's monitoring report is the necessity of adding some new gear types into that to improve the coverage so we capture kind of the ontogenetic shifts, the shifts in habitat preferences through the life history of that animal by adding some additional gears into the fishery-independent sampling.

Mr. Currin: Other questions for Carolyn about her SSC report or comments? All right, thank you very much. Our next agenda item is the status of the Red Snapper Interim Rule. That's a number of attachments, three through eight. Someone from the Regional Office is going to do that. Dr. Crabtree, will that be you or Phil?

Dr. Crabtree: That’s going to be Andy Strelcheck.
Mr. Currin: I'm sure I don't need to remind everybody where we are, but I will. At our last meeting we passed a motion to ask the Region to implement an interim rule for red snapper, closing that fishery and prohibiting harvest. At the same time I think we asked the Regional Office not to implement that until after this meeting so that we could come back and reconsider
timing with Amendment 17 and the implications of putting that in and having it lapse and other considerations as well.

Mr. Strelcheck: My name is Andy Strelcheck. I am with the Southeast Regional Office. I oversee the Limited Access Program’s Data Management Branch. Over the last several weeks we have been working on evaluating the effects of Amendment 17 as well as Amendment 16 and even incorporating the effects of Amendment 13C to see what impacts it would have obviously on the currently proposed actions.

Yesterday we met with the SSC and went over this with them. There were very few comments. We'll discuss those throughout this presentation. One of the things that we didn't have yesterday that we now have -

Mr. Currin: Andy, excuse me one second, if you don't mind, I was just following the agenda I had, Roy, and the next item after the SSC Report was the status of the interim rule on red snapper.

Dr. Crabtree: Oh, I'm sorry. The interim rule is under review in the agency, and I do not have a timeline as to when - you know, there is going to be a proposed interim rule with a 30 -day comment period, but I do not have a publication date as to when that interim rule will publish.

Mr. Currin: Okay, questions for Roy about the status of the interim rule? George.
Mr. Geiger: Is it the intention of the Regional Office or the Service to implement the interim rule immediately upon its approval or is there going to be a six-month delay possibly or a twelve-month delay to coincide with the implementation of potential regulations in Amendment 17 ?

Dr. Crabtree: Well, that's something I would look to guidance from the council for, but if you look at the timing of this and the way it's going to lay out now, if the rule were to publish, say, July 1, then there would be a 30 -day comment period, and then it would take us minimally 30 days to respond to comments and publish a final rule.

So, July 1, published rule; comment period ends August 1; a final rule potentially publishes September 1; effective 30 days later; the fishery could potentially be closed in October. If we take final action on Amendment 17 in December, we could have a final rule in place by then, and there would be no lapse.

If we took final action on Amendment 17 in March, we could still potentially, I think, have the final rule. That would still give us six months to get a final rule in place by October. Giving of the timing of that, I think that we can have Amendment 17 done and not have a lapse in the closure.

The only way to have the interim rule effective sooner than that would be to waive public comment and all of that; and I think given the magnitude of this, I do not want to waive the public comment period on the rule. I think if you look at realistic timelines for Amendment 17
being December, I hope, possibly March, and the timing of the interim rule, it seems to me that there shouldn't be a lapse between the two.

Mr. Geiger: Mr. Chairman, I guess I look to Gregg and does that kind of follow your timeline; does that match what we're looking at in terms of Amendment 17? I guess based on what we heard today with the Hester Report and the fact that we're going to kind of wait until we get the dome-shape versus flattop analysis and see what those sensitivity runs show, that we're looking probably at possibly as late as December.

Dr. Crabtree: Well, let me clarify no one is waiting in terms of getting these documents put together. Now we will get the dome-shaped selectivity outcome and you will have it by the next council meeting. I expect we'll have it I hope in a matter of weeks. Now, barring something unforeseen and we may make some changes to things; and more importantly and more likely to be significant is trying to factor in some of the recruitment estimates into the projections somehow, but we're going to have to do that. We're working as hard as we can.

We've got the analysis that Andy is going to talk about here on the closed areas and all those kinds of things, and all that work has to be done. What we're actually just talking about is what is the ACL's exact magnitude going to be and some things like that, so we're not talking holding anything or slowing down on any of this unless something unexpected comes out of these.

When I say we need to see those runs before we put any rules in place, yes, we do, but given the timeline I just laid out to you there are not likely to be any rules in place until well into the fall, anyway, and so I'm not talking slowing anything down and I'm not talking delaying anything unless something unexpected comes out of all this. I will defer to Gregg as to whether he thinks final action on 17 in December or March is realistic or not.

Mr. Waugh: If we get preferred alternatives for every action in Amendment 17 at this meeting we might be able to have a document ready at September for you to approve for public hearing. If we don't get preferred alternatives for all actions, then it's going to be very difficult, if not impossible, to have a document for you to approve for public hearing in September.

If we do approve it for public hearings in September we've got two weeks blocked out in November for public hearings. If we can get the DEIS filed such that the comment period closes before our December meeting, then we could give final approval in December. It really hinges on when you all give us our preferreds. If you don't give them to us here, then we slide a meeting. That would put it in March.

Mr. Currin: Any other questions for Roy? George.
Mr. Geiger: I guess the question goes back to the interim rule. During the earlier part of Dr. Crabtree's comments, he indicated he would look for guidance from the council as to when to implement the interim rule - I don't think that's on our agenda to talk about - recommending when we believe the interim rule should be implemented.

Dr. Crabtree: Well, if you recall the last council meeting and the request for the interim rule, the council specifically requests that we not publish a final rule until after this council meeting. I think the reason for that was to have a better idea of how these things would time. Now, for a variety of reasons, I had hoped we would have the proposed rule published before this council meeting, but that hasn't happened. Monica can comment, but in terms of discussing timing and all that I don't think there is a problem with that.

Mr. Currin: Yes, George, I will get to that discussion. It is not a specific agenda item. We've got a lot of discussion to occur around 17 and how the final structure of that will take and whether we split certain aspects out or add certain aspects to it, so at that point I think we'll have a better idea about timing for all of these things. That, of course, may impact our decision about any requests to Roy regarding the interim rule.

All right, I think what I'd like to try to accomplish the rest of the afternoon, keeping in mind in Dr. Crabtree has got a town hall meeting with interested parties at 5:30, between now and then what I'd like to do is let Andy continue with his presentation and then Tony Lamberte is here and has got a presentation on the recreational economic impacts.

Mr. Strelcheck: I'll be discussing essentially a consolidated presentation of what we presented yesterday to the SSC. Just as an outline as to what I'll be talking about, obviously the objectives and goals of our analysis, what management actions are in place or being proposed that would affect red snapper, the methods and results we applied for each sector of the red snapper fishery, the overall cumulative reductions achieved for all of these management actions, and then some sensitivity runs looking at the effects of the release mortality rate on the outcome of the results.

As I mentioned earlier, Amendment 13C and Amendment 16 will have effect on the baseline red snapper catches. We used the baseline of 2005-2007. Amendment 13C was implemented in mid to late 2006. Amendment 16 is still in the implementation stage. We also evaluated those effects in a cumulative fashion with the Amendment 17 proposed regulations to determine the overall extent of spatial closures necessary to achieve reductions in red snapper fishing mortality.

Just to refresh everyone's memory, Amendment 13C has largely quotas and trip limits that affect the commercial sector primarily, so those were factored into our commercial analyses. Amendment 16 proposes closed seasons, new quotas, as well as bag limits. The quotas were obviously used for the commercial analysis. Closed seasons were also factored into both commercial and recreational analyses.

I won't go through the Amendment 17 alternatives, but obviously it's a combination of a fisherywide closure as well as closed areas that vary from four statistical areas up to seven statistical areas and either a specific depth range or a wider depth range. There are certain exceptions which we had to take into account particularly for the commercial fishery.

This is just a graphical display of the various areas under consideration for closure. You can see this is the 98 to 240 foot closure in the statistical areas offshore here northward through Georgia and South Carolina. This closes 98 to 240 feet up to central to northern South Carolina. These
last two alternatives are essentially analogous to the first two except they close the entire statistical area in all depths.

We looked at these specific alternatives the best we could. For the recreational fishery depth information is lacking in terms of where catches occur so we weren't able to look at specifically what reductions we would achieve associated with Alternatives 3 and 4. For all future tables and summaries that I present, we've used Alternatives 5 and 6 as a proxy with the expectation that obviously the reductions will be less than those alternatives.

For the commercial analyses, coastal logbooks and supplemental discard data were used. We applied a trip reduction model that was developed by Jim Waters last year for Amendment 16. This model calculates impacts of regulations on catches, revenues and costs. If trip revenue was less than opportunity costs, trips were eliminated. We then evaluated what the new red snapper removals would be. Assuming closures would take place, landings were converted to discards and applied a 90 percent mortality rate.

We didn't factor in obviously any release mortality associated with spear fishing or any discards. Discards were estimated in the same approach as SEDAR 15, which is a general linear modeling approach that we maintain consistency with previous methods. This just gives a graphical idea of where the reductions occur in the commercial fishery.

You can see off of Northeast Florida that grid cell $30-80$ represents 39 percent of the overall commercial harvest as reported to logbooks; grid cell 29-80, about 15.5 percent and so on, but obviously the central portion of the commercial harvest is here off of Northeast Florida. There also is a good amount of landings occurring off of statistical areas bordering South Carolina.

In looking at what were the effects of the various management actions, keep in mind to achieve the reduction of fishing mortality you need approximately an 87 percent reduction for the yield association with F 40 percent SPR. When we looked at just what effect would Amendment 13C have on red snapper harvest, it reduced harvest by approximately 1 percent relative to the 20052007 baseline landings.

If you factor in the effects of Amendment 16 you get to a 17 percent reduction. Then when you start closing the red snapper fishery entirely as well as adding closed areas for snapper and grouper harvest, you get reductions in the range of 55 to 81 percent for the alternatives proposed in Amendment 17.

None of them achieve the reduction by themselves for the commercial fishery, but they do obviously result in substantial reductions. In summary, Amendment 13C estimated to have minimal effect. Amendment 16 will obviously have moderate reductions and then substantial reductions would occur for Amendment 17 alternatives, but as mentioned previously none of those achieve the necessary reduction in commercial removals.

For the headboat fishery we used headboat catch records and discards, and there are discards reported to the headboat survey but they weren't used for the SEDAR assessment. To maintain consistency we used the same methods as SEDAR 15, which uses MRFSS discards to landings
ratios, and then applies that to the headboat landings' estimates in numbers to calculate discards in numbers, and then those are converted to pounds.

The challenge with the headboat surveys, we don't have any information on profitability of trips or species sought by those headboats or targeted by those headboats, so we had to come up with a way of defining, well, what constitutes a target trip and how would that target trip ultimately be changed by Amendment 16 regulatory actions.

We used essentially an amount caught on headboat trips as reported through the logbook survey as well as a percentage of the snapper grouper landings that were represented by that catch to define target trips. We then went in and either eliminated those target trips or modified their catch rates to correspond to trips that weren't defined as target trips, that were catching other species and primarily weren't catching red snapper and then re-estimated the landings in that manner to evaluate what were the effects of Amendment 16.

From that we recomputed red snapper landings to account for those eliminated or modified trips to determine the net effect of Amendment 16. For Amendment 17 this was probably our greatest challenge. There is logbook data reported for latitude and longitude, but the data is partially complete.

Reporting has improved greatly over the last three or four years, but there are certainly a lot of trips that you don't where they're catching red snapper or they report incomplete information, so we used a hierarchical approach. I don't go into detail here we talked about with the SSC yesterday, but essentially the approach used as much of the data as we possibly could to assign landings to statistical areas.

We're fairly confident that we were able to at least capture the resolution of defining landings and therefore discards in terms of statistical areas. Once we did that we also looked at, well, what would be the effect of also eliminating target trips knowing that there would be a closure in place for red snapper, so we looked at what impact would the closure have and we evaluated reductions associated with target trips that would no longer occur.

We made the assumption that removals would be set to zero in closed areas. We're assuming a hundred percent compliance - certainly that's not necessarily a great assumption, but certainly the simplest for this particular analysis - and then a release mortality rate of 40 percent, which was the SEDAR 15 recommendation, was applied landings data or previous landings data in areas that weren't going to be closed under Amendment 17.

This gives you a graphical representation of where the recreational fisheries’ landings are distributed. I've aggregated across some statistical grids because of confidentiality. Overall the statistical grids are fairly consistent with the commercial fishery. There are some differences in terms of the primary ranking of the grids.

Statistical Areas 29-80 and 29-81 are the greatest landings for headboat and then north or south of that particular area off of Florida. Overall that area accounts for about 68 percent of the overall headboat red snapper landings. You can see the farther north you go, unlike the
commercial fishery, there are less landings being reported off of South Carolina in terms of the headboat fishery than the commercial fishery.

In terms of the Amendment 16 effects, with regard to the reductions achieved from status quo, you can see that it was a fairly small range. Even when we started eliminating target trips, the greatest reduction that we achieved was an 8 percent reduction in overall landings. The reason this was is that although there was a large number of target trips determined to catch vermilion snapper, most of those target trips caught very few red snapper and as a result did not reduce landings greatly.

For shallow water grouper there was a very, very small fraction that were defined as target trips and ultimately they had virtually no impact on the overall outcome, so everything was being driven by the vermilion snapper five-month closure that is proposed in Amendment 16. Then if you apply Amendment 17 actions to what was done for Amendment 16, if you looked at the last column there, it is the most important, so Amendment 16 has obviously an effect on harvest up to 8 percent.

You then eliminate target trips in Amendment 17 and apply the closed seasons and closed areas for red snapper, you do, under Alternatives 5 and 6, achieve the 87 percent reduction for red snapper fishing mortality. Under the Amendment 16 target trips eliminated, essentially that is factoring in reductions associated with Amendment 16, but assuming that no red snapper trips would be eliminated under Amendment 17; that those would occur as is and would continue to discard red snapper rather than landing those red snapper that were previously caught.

For the most part you see the biggest changes in reductions associated with Alternative 2, but Alternative 2 never achieves the total reduction in harvest you need to get to. Overall, in summary, slight reductions associated with Amendment 16; substantial reductions associated with Amendment 17; and Alternative 2 is the only one that didn't achieve the necessary reductions. Other proposed alternatives may achieve those reductions.

From that previous table you can see I don't present Alternatives 3 and 4. They'll obviously have lesser reductions in Alternatives 5 and 6 because they close a narrower band within the statistical areas, but there was no depth information for us to partition out landings into a finer spatial scale.

I'll go through MRFSS fairly quickly, but essentially the similar approach was taken as headboat. We used MRFSS landings and discards. We had to define target trips to evaluate the effects of Amendment 16. MRFSS does provide angler-indicated target species as part of the survey. They'll report either primary or secondary species sought.

We could also use obviously catch rate information to look at what trips would constitute a target trip for vermilion snapper, shallow water grouper and which ones wouldn't. Those target trips, once they were defined, they were eliminated and we recomputed the red snapper landings as discussed for headboat.

As I said, with headboat one of the challenges was partitioning landings into spatial grids. For MRFSS there is even worse spatial scale, so we had to use the headboat landings as a proxy. It's certainly not a perfect approach, but it was the best approach we felt like we could come up with. We used the proportion of headboat landings off of each of the states and were able to apply to the landings and removals that were occurring for those statistical grids to come up with an estimate of overall landings by statistical grid for the South Atlantic.

The same as headboat, we set removals equal to zero in closed areas and then we applied a release mortality rate of 40 percent to any landings that were occurring in areas that weren't currently closed but would be affected over a wide fishery closure. Here you can see the problem or dilemma we are faced with in terms of MRFSS.

The areas shaded, essentially those are the best spatial scales that we can work with in terms of how the landings are reported. Obviously that doesn't do you any good in terms of making decisions about where the closures should be placed, so we used the headboat data as a proxy. The patterns, for the most part, obviously are going to be very similar to headboat.

They're going to differ because there is a little bit different distribution in the landings by state for MRFSS versus the headboat. More landings occur in Florida based on MRFSS and less in South Carolina. The distribution changes, but overall the heart of the fishery still remains from Northeast Florida to Central Florida; and obviously the farther you go away from that particular area, the lower the landings get.

Overall, when we eliminated target trips based on Amendment 16 effects, it had very little change in the overall landings. The reason this was is that there were very few trips that were catching either vermilion snapper or shallow water grouper that also reported catching red snapper. As a result we got only a 2.3 percent reduction in red snapper landings when you eliminated those target trips.

Essentially the first column on this slide represents Amendment 16 if it had no effect, so you just don't even include the 2.3 percent reduction you achieved. We evaluated obviously the closures, and you do get a significant reduction out of Alternatives 5 and 6 associated with the closed areas and closing the fishery.

If you also eliminate target red snapper trips, then you get obviously greater reductions. You're assuming that those will no longer occur as a result of the fishery being closed and fishermen's ability to no longer go out and catch those fish because they're unavailable to keep. The reductions themselves are very close to one another when you get into closing the entire fishery as well as looking at spatial area closures.

So similar to pretty much the two previous summaries, slight reductions associated with Amendment 16; Amendment 17 is expected to have substantial reductions; and overall Alternatives 5 and 6 and possibly Alternatives 3 and 4 may achieve the necessary reductions in removals.

Now, I know this is a really, really busy graphic, but what we tried to do is from all the information I just presented, combine it all together, and come up with the best case and a worse case, and I'll use those terms loosely. The worse case is if the effects of previous regulatory actions pretty much don't happen if you don't get the reductions that you would expect to achieve because of those regulatory actions.

The best case is you achieve all of those reductions as well as meeting all the assumptions that we've made in terms of conducting the analysis. The two highlighted boxes in green are the only two, when you combine everything together, that achieve the 87 percent reduction that you're looking for, and those aren't the best case scenario.

That would be closure of I think the seven statistical areas either by depth range or by just closing the areas entirely. The boxes highlighted in blue don't achieve the F 40 percent benchmark but would achieve a lower SPR benchmark if considered. As I said, we looked at the sensitivity of our results related to release mortality.

The results were a little bit surprising at first, but ultimately in reducing the release mortality rate for the commercial and recreational fisheries, you end up increasing the likelihood the reductions could be achieved across all of your alternatives being considered. If you apply the same release mortality rate to the commercial fishery as is currently used for the recreational fishery, it pretty much has the same outcome, so a variety of those combinations ultimately results in the 87 percent reduction in harvest that you're looking for.

You don't get huge gains in changing the release mortality because your baseline also changes when you change release mortality. If you increase release mortality or lower it, the number of removals is increased or lowered in terms of your baseline, and so then you're reducing off of a different baseline and your percent reductions ultimately don't amount to much in the way of changes.

This is probably what was discussed most at the SSC meeting, and I wanted to end this presentation with these assumptions because certainly they dictate overall the outcome of the analysis. We don't have good spatial information on discards, so they were assumed to be proportional to landings.

We did not take into account effort shifting from closed areas. This was certainly a recommendation by SSC members yesterday in terms of something to possibly investigate, although somewhat complicated especially in determining where that effort shifting might occur. If you closed one area, where would the effort shift to and what species would it shift to?

We also assumed the release mortality rate as constant through time regardless of regulations. We brought up yesterday that if you closed areas there is certainly potential for release mortality on average to increase or decrease if fishermen shift their effort to shallow or deeper waters. One concern is certainly compliance with closures.

If you're closing such a large area we've assumed a hundred percent compliance, but certainly compliance could be much less than that. Then, finally, headboat landings are assumed to be
reasonable spatial proxies for assigning MRFSS landings. There are a lot of assumptions there and ultimately the main focus of yesterday's discussion went back to effort shifting and how we possibly could account for that. With that, I know I have thrown out a lot of numbers and figures. I'll take any questions.

Mr. Currin: Thank you, Andy, very much. George.
Mr. Geiger: Thanks, Andy, and thank you for all the work you've done since the last meeting on coming up with this analysis and how previous regulations impact what we're planning to do. I know it's never nice having to carry bad news; in this case terrible news. I do have a question going back - and I may have missed it and you may have addressed it and I apologize if you did and I didn't catch it, but when you put the blocks up when you showed the spatial closures, it seemed like the line went very close to the beach.

I was just wondering is there any way - you know, in one case you did have some other dimensional type blocks drawn - is there any way that those lines could be drawn closer to the break, that 90 -foot break? I note red snapper are encountered in more shallow water, in 50 or 60 feet in some cases, but primarily those people are very specialized who target those fish; and if it were open at least from the beach to 90 feet, 85 feet, people would have a chance to fish for sea bass or some vermilion snapper, some other form of bottom fish.

Mr. Strelcheck: With the commercial logbook there is depth information provided, so it is feasible to at least get an idea of where those fish are being caught in terms of depth. There is no real specific spatial information in terms of where the red snapper catches in the commercial data base occur or MRFSS.

Headboat does have some pretty good spatial resolution within lat/long and some sub-grids within those areas. The problem you face with the headboat data set is that oftentimes the information provided is incomplete or it's not reported at all. I think John had looked at certain areas of the headboat survey, and Georgia as well as, what, North Carolina or South Carolina, one of those two areas, they did not have any reported landing locations for headboat, so we had to go back to assigning those landings through statistical grids to define a spatial scale.

I think there is information at least in terms of the life history of the species to argue why it wouldn't go to shore, that they occur at minimum depths of 40 or 50 feet or beyond, but it is very difficult, obviously, to get a finer spatial scale than what we have provided.

Dr. Crabtree: Andy, what are we assuming in terms of trip cancellations as a result of closing red snapper down? For example, in the private recreational sector what are we assuming happens?

Mr. Strelcheck: We define target trips as greater than one red snapper per angler and just eliminated those entirely if they met that criterion. The difference between Alternative 2 under Amendment 16, no effect, and essentially the other column is the percent removals that are being taken out because of trips being eliminated.

Dr. Crabtree: Okay, so if trips which caught red snapper on them - I guess I'm still not following - trips that caught a red snapper, we're assuming some fraction of them are cancelled or if they caught a certain amount they're cancelled?

Mr. Strelcheck: Yes, specific to red snapper, if you assume that trips are cancelled entirely because of closures of snapper grouper, then certainly the number of trips -

Dr. Crabtree: Yes, just looking at red snapper.
Mr. Strelcheck: Right.
Dr. Crabtree: And what again, if they had to catch so many and then we assume -
Mr. Strelcheck: Greater than one red snapper per angler.
Dr. Crabtree: And we assume that trip is cancelled?
Mr. Strelcheck: Correct.
Mr. Currin: Other questions for Andy? All right, thank you, Andy, very much. Go ahead, John.
Mr. Carmichael: I think the way you treated discard mortality as far as the potential changes in the commercial might be a little different than what we had presented from the staff perspective at the council back in March. You mentioned you showed the sensitivities, which is great, and then you mentioned changing it in the baseline as well; whereas, in what we had brought forward in talking about the areas in March was the argument that the discard mortality changes because the effort of the commercial fishery doesn't go out as far as it did. That was justification in the SEDAR so it's only an effect that takes hold in the future.

Mr. Strelcheck: Yes, we talked about that as well and certainly could look at that. If, for instance, you have a 90 percent release mortality for commercial now and you assume it's going to be some amount less given the new depth distribution, then your effective reduction would be much greater.

Mr. Carmichael: Right, so if the council supported that that would probably be pretty easy to work into this. The other is a little clarification on the depth, too. When we set up those depth zones in the council at March, it was really looking at the information that's available from the commercial fishery, which is admittedly pretty scarce, and then also the life history information to say, well, there is probably very few of them being caught inside of 30 meters and that survival should be pretty high, so we were kind of effectively treating that as a zero. But, what you say about the lack of information in there was appropriate so it comes down to the council to accept that assumption or not and making that adjustment for that.

Dr. Crabtree: Well, just to follow up on what John said about the commercial fishery, it seems to me the same would apply for the recreational and headboat fisheries as well. If we close outside a hundred feet, they're going to keep fishing, and I think they will inside, then it seems to me
their release mortality would come down, too, because I don't believe - you know, it may be 40 percent if you're fishing 150 to 200 feet, but if you come in and start fishing inside a hundred, I would guess the release mortality would come down considerably. It seems to me that would apply. If we go with some sort of depth boundary, that would apply across all these fisheries and it sounds like that could make a substantial difference.

Mr. Carmichael: Yes, I think that's the key assumption to look at. The SEDAR cited the difference in the average depth for commercial versus recreational, so I think in areas outside of the potential closure the recreational may not change their depth much. But as to the extent they were fishing out in that deeper water where the deepwater species are, there could be some change there as well, definitely, depending on what happens with that deepwater regulation component. We need to see how that goes before we can work on this.

Mr. Geiger: Mike sent this presentation out to all the council members. Mike, is there any way to get this available to the public over here? This is an important presentation I think.

Mr. Collins: Yes, I'll put it on the website.
Mr. Geiger: Can we do that quickly, please?
Mr. Currin: Anything else for Andy before we move on? All right, Tony Lamberte and he is going to make a presentation on the recreational economic impacts.

Mr. Lamberte: My name is Tony Lamberte, and I work as an economist with the Regional Office of the National Marine Fisheries Service. My presentation today is only about the recreational sector. I'll be very brief on this. This is also indicative of a simple and straightforward approach we took in analyzing the effects on the recreational sector.

Jim Waters will handle the commercial sector and that will be I think for tomorrow. In analyzing the effects on the recreational sector we take the usual approach of determining changes in angler consumer surplus and for-hire vessel producer surplus. Consumer surplus is essentially the benefits an angler derives from fishing less all the fishing costs. The producer surplus, which we proxy here by the net operating revenue of the for-hire fishery, is equivalent to all the revenues less trip costs. Essentially this is a return to captain, crew and owners.

We are not considering any regional economic impacts in these analyses. This type of analysis goes through the various flows of the commodity as well as the financial flows, and that's the usual thing I think that a lot of people are looking at, but we're not considering that. We just limit it to the one that is obligatory for us to conduct the analysis.

The methodology we used here follows that of Amendment 15A and 16, but mimics closely the one for the interim rule for red snapper. For economic values we express it on the per trip per angler basis. Consumer surplus we used $\$ 53.53$ in 2008 dollars; essentially the benefit an angler derives from fishing less all the costs.

For producer surplus net operating revenue, we have one charterboat and the other for headboats, and these are essentially profits to the charterboat and headboat on the per angler trip basis. We used also as a baseline these target trips for red snapper and for the rest of the snapper grouper species.

If you look at the headboat fishery there is no targeting for headboats, so we used essentially the angler days for that, and this would tend to overestimate the economic effects on headboats. If you look at target trips here it has the highest in terms of red snapper when in fact headboats account approximately only like 15 percent of the total recreational catch.

The calculation of the effects is simply to multiply the changes in the consumer surplus times the number of target trips for changes in consumer surplus, and the change in net operating revenues is net operating revenue times the change in the number of target trips. Now, the way we handled where we can specify the value that is attributable to red snapper, that is why we can change the consumer surplus per trip.

Now, we don't know whether some of those trips will be cancelled or not. Probably some will be cancelled but others might not be. We retained the number of trips to generate the effects on consumer surplus. But in the case of net operating revenue, our information is only for the whole trip, so it includes not only trips for red snapper but all other species. The way we handled this is to simply change the number of target trips and retain the net operating revenue per trip.

If we apply this, what I call the baseline economic value is just a product of the per trip value times the target trips, we generate these various baseline economic values. If you look at the red snapper case and headboats, you can essentially see how the headboat sector dominates the whole thing.

We will be doing a lot more adjustments on this based on the analyses that was presented to you earlier by Andy and maybe John to the SSC, but that is essentially our baseline economic values, and what they will do is look at the various alternatives and simply reduce this baseline on the basis of what those alternatives areas. Alternatives might affect only red snapper or they might affect both red snapper and the other species.

Take the case of Alternative 2 which prohibits the harvest of red snapper. We essentially just look at the effects on the red snapper section of that baseline and then because it is a total prohibition on the fishery, we simply considered the loss in the economic values corresponding to the total baseline value for red snapper.

Now in the case of Alternative 7, this is a reduction of the bag limit from two to one fish. What we do here is that it will not affect any - hopefully will not affect any trip cancellations or cancellation of trips, so we look mainly at the consumer surplus effect and only on red snapper. From two to one we just assumed that this will be equivalent to a 50 percent reduction from the baseline, so we have that number.

For the others, Alternatives 3 to 6 , which is the closure of the red snapper fishery plus area closures, what we will do here - we haven't done it yet - is to add the effects of the alternatives to each of the area closures. When we determine what those percentage reductions on target trips of each area closure, we will apply the baseline information there and then add it up to the effects of Alternative 2, and that will be the various effects of each alternative.

Now, just looking at the alternatives we can essentially rank from smallest to largest short-term adverse economic effects for the various alternatives, $1,7,2,3,4,5$, and 6 . Six has the highest effects. As verified to some extent by Andy's presentation, it has the highest reductions in terms of removals from the fishery.

Now let me go straight to the issues on limitations here. The first one is about headboat target trips. There is no information on targeting of species on headboats. We used the angler days coming out of Georgia and Northeast Florida because they essentially account for more than 70 percent - this area accounts for more than 70 percent of red snapper harvest with the headboat fishery.

But even if we just limit it to this area, it will still tend to overestimate the effects. As I said earlier, we will make some adjustments of this based on the results that Strelcheck and others did in analyzing the various area closures. Then the consumer surplus values, this is actually based on the Gulf Red Snapper Analyses.

For the charter and private consumer surplus, it is based on the 2003 angler survey, but since it is conducted for the southeast and the analysis was done using all the available information from that, consumer surplus is not only relevant I think to the Gulf but has also strong relevance to the South Atlantic.

Now in the case of headboat, the consumer surplus is essentially based on the headboat study in the Gulf area. To what extent it applies to the South Atlantic I'm not so sure, but to some extent that there is some commonality in the way anglers target through headboats, this may have some validity on that, although I was told by some that in the case of the Gulf anglers, through headboats, actually have more targeting - or target red snapper probably more than the headboat anglers in the South Atlantic.

The use of Gulf Headboat Consumer Surplus may overestimate the effects on the South Atlantic. Now in the case of net operating revenue, the only information we have are the ones based on the Gulf. There was a charter survey in the Gulf conducted in 2002 and 2003 and the headboat studies conducted in 1999, and data was culled from this information and we came up with the various net operating revenues for charter and headboats for the Gulf, and we used that also for the South Atlantic in the absence of other information.

Now, again, if there are some common characteristics between charter and headboat operations in the South Atlantic and Gulf, then there could be some validity in the use of these numbers. The other one is the target trips. We use target trips generally because it carries more economic meaning than the other trip characteristics like catch or harvest trips.

In terms of determining expected effects, targeting usually is an expression of the demand for the trip. All the others are sort of incidental trips that happen to catch those other species. Now some of those catch trips may actually turn out to be target trips, but for our purpose we just limited it to target trips in this case.

Now there is also the issue of cancellation of trips. Now if you close the red snapper fishery, for example, it's probably not true that all trips will be cancelled for red snapper because they can target other species. But as you start closing larger areas, then the cancellation of trips might be a good possibility.

One issue is that in the case of the study in the Gulf, for example, when the red snapper closure was analyzed we found out that there was some potential shift in effort to other species like grouper and dolphin. This might also be true here, but the extent of that we didn't know in this case so we just assumed that there are no cancellation of trips in calculating the consumer surplus for red snapper, but there will be cancellation of trips when determining the net operating revenues from the for-hire sector.

There is also an issue about the baseline economic values. Now these are not strictly baseline because the consumer per trip were actually based on changes from a bag limit of two to zero, but I believe it's good enough for us to start with and is convenient enough for determining the impacts of the various management measures. Lastly, our baseline values do not take into account the effects of all the other amendments. I think that's all I have.

Mr. Currin: Tony, thank you very much. Questions for Tony? Brian.
Dr. Cheuvront: Thank you, Tony, I appreciate that. You talked about how you've haven't been able to take into account some of these things. Can we expect that we're going to get something later on that will take into account adjustments to consumer surplus and net operating revenue losses particularly as a result of some of the other regulatory actions? Will we get something like that in the future?

Mr. Lamberte: I would say yes, especially with respect to the area closures that we haven't taken a look at yet. We will be having some adjustments to those.

Dr. Cheuvront: Okay, and I have one question additionally about your net operating revenue. You said that you borrowed the notion for that from the Gulf studies that were done. Did you have just a single value for net operating or did you actually have it broken down by categories that you were able to adjust for changes that may not have been consistent across all net operating revenues?

Mr. Lamberte: Unfortunately, it is the total for the charter and total for headboats. We cannot break it down by, say, species, for example, or by area.

Dr. Cheuvront: Well, not by species but by different operating costs and things like that when you were able to actually calculate out what the revenue would be or did you just - I guess what

I'm trying to figure out is how did you calculate net operating revenue from what you had used in the Gulf.

Mr. Lamberte: It's just a total. We cannot go more specific than that.
Ms. Shipman: Tony, when you do go back and adjust the runs, will you be also looking at that of displaced effort? For instance, the Savannah Fleet could displace their effort off of Hilton Head, for instance, and so potentially some of that economic impact could be muted or buffered to some extent. Is there a way to take that into consideration?

Mr. Lamberte: Not directly, in a sense, because the study we have is mostly for the Gulf area. They're looking at, say, actually various species rather than the areas, so they can shift trips from one species to another but not from one area to another.

Ms. Shipman: But in this case we're talking about an area closure; so while they may shift westward into a shallower area, they may also shift northward. It just seems like it's something we're going to need to at least take into consideration and it may just be from a qualitative standpoint. I don't know whether there is some -

Mr. Lamberte: If there is some qualitative, yes, we will be doing that, but in terms of quantifying the effects I wish we had a way of doing it now.

Mr. Currin: Anything else for Tony? Tony, thanks again very much for your presentation and work that went into it. We will recess the Snapper Grouper Committee until 8:00 o’clock tomorrow morning.

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened in the Ballroom of the Hutchinson Island Marriott, Stuart, Florida, Thursday morning, June 11, 2009, and was called to order at 8:00 o’clock a.m. by Chairman Mac Currin.

Mr. Currin: We will reconvene the Snapper Grouper Committee. We will pick up with our agenda from yesterday. Erik Williams was scheduled to give us a presentation on the red snapper rebuilding projections, and Dr. Ponwith is going to fill in for Erik this morning and pick up on that. Then we will move into Jim Waters' presentation on economic impacts. I think this presentation will be sent around if we do not have it yet or unless it's in your e-mail inbox.

Dr. Ponwith: Mr. Chairman, this morning what I'm going to do is talk a little bit about a task that we received and what the outcome of those analyses are. We were asked to provide a timeframe for rebuilding in the absence of fishing mortality; provide the timeframe for rebuilding in the absence of fishing mortality plus one mean generation time; provide projections of spawning stock biomass, recruitment, landings, discards and the probability of a stock recovery from 2000 to Tmax for a various suite of fishing mortality rates; and also provide similar projections to those assuming no directed harvest; and having discards corresponding to the yield associated with fishing mortality rates in that suite.

We were asked to do that based on an MFTF of F 40 percent. What I'm going to do is go through and show you some graphs of what those projections look like, but first let me talk through what the outcome was. In the projection with F equals zero the probability of stock recovery is expected to exceed 50 percent in the year 2024.

With a stock recovery expected by the beginning of 2025, Tmin is 15 years. The mean generation time is 20 years according to the SEDAR report and thus Tmax is 35 years. This value would imply that the stock recovery would occur by 2045 at the latest. Now some of the graphs - this is a projection of fishing mortality at the current rate.

The next slide shows the projection of fishing mortality at Fzero, and the number in parentheses shows the year where we cross the threshold with a 50 percent probability. You will see that the dotted line is the actual projection, and the lines surrounding that are the confidence intervals. The next slide shows the projection of fishing at 65 percent of F 40 percent, and the crossover year on that is 2030.

The next slide is a projection at fishing at 75 percent of F 40 percent, and the crossover year is 2032. This is the projection at fishing at 85 percent of $F 40$ percent, and the crossover year is 2035. Then finally the projection at F 40 percent; you'll see that it does increase over time, but between now and 2050 asymptotes often doesn't cross that threshold line. We never achieve above I believe about a 0.45 percent probability of achieving that threshold line.

The other component of this was to look at discards only in the fishery, and in that the numbers for these are slightly different, and the reason is because for the discards we excluded dive fishing from the analysis, and then we applied the same discard mortality rate used in the assessment, which is a mortality rate for the commercial fishery of 90 percent and a mortality rate for the recreational fishery of 40 percent.

Under a fishing mortality rate at the current level, this is what the projection looks like for discards only. For 65 percent of 40 percent the crossover line is the year 2027. For discards only fishing at F 40 percent the crossover line is in the year 2029.

Those are some examples of what the full range of discard levels are and the crossover years. The additional graphs follow that same trajectory where the year crossover changes depending upon the level of the fishing mortality and the full suite of graphs and included coupled with the landings and the fishing mortality. There are a suite of four graphs for each of those scenarios and are in the full report in Attachment 10.

Mr. Currin: Thank you, Bonnie. Questions for Bonnie or comments? I see none. Thanks, Bonnie, very much for filling in for Erik and we're sorry he couldn't hang out and be with us today. Jim Waters is getting plugged in to provide us with his economic analysis of the commercial fishery. Jim's presentation will also be e-mailed around to everyone. We don't have that in our briefing book right now. There is a paper that is provided in your briefing book, Attachment 14.

Dr. Waters: My name is Jim Waters. I work for the Science Center. I'm here to talk a little bit about our preliminary economic analysis of the proposed management alternatives for the commercial fishery. You've heard a little bit about the recreational fishery yesterday. Now I spoke a couple of days ago to the SSC, and a lot of that discussed talked about the method.

I'm going to skip today directly to the bottom line, and Attachment 14 in your briefing book has more details about the method, if you're interested, or you can ask questions as we go along here. There are several alternatives for the speckled hind and warsaw grouper fishery. Methodologically, the no action alternative and Alternative 2 are the same; they both prohibit the harvest of both species.

Alternative 3 would prohibit the harvest of all of these deepwater species listed here, and that would be the most restrictive management alternative. Alternative 4 and 5 are less restrictive because they allow some exceptions, most notably tilefish. Here are some results. I hope you can see them from the back of the room.

The graph on the left plots dollars losses in net operating revenues. The net operating revenues are defined as revenues minus trip costs, and they do not account for labor or fixed costs. The different bars refer to the different alternatives. This is the zero line here. The lines go below zero indicating that these are negatives or losses to the industry.

The red line is Alternative 3. You can see by far and away that would be the most restrictive and most costly alternative, and that's the alternative that includes the prohibition on tilefish. Now over here it is the same graph except it is presented in percentage terms. Now these are percentage reductions based on what we think is going to happen after we account for the effects of Amendments 13C and 16.

Now 16 hasn't even gone into effect yet, and that is going to have substantial impacts on the fishery, but this has already accounted for that. For example, Alternative 3 could reduce net operating revenues to the longline fishery by more than 80 percent over and above the effect of Amendment 16. This is the same results but it's organized differently. The last graph showed results organized by gear type. This shows results organized by state; North Carolina, South Carolina, Georgia, Northeast Florida, Central and Southeast Florida, the Florida Keys and the total. Once again Alternative 3 would have the largest impact.

There were several alternatives for tilefish. Most of those alternatives looked like they were primarily administrative in nature in terms of how you're going to define the ACLs and the ACMs. When you look through them from the actual management perspective, it looks like all of the alternatives would specify a slight reduction in the commercial quota for tilefish. Right now the rules are 295,000 pounds and a sequence of trip limits which is 4,000 pounds per trip unless 75 percent of the quota is reached prior to September $1^{\text {st }}$, at which the time the trip limit would decline to 300 pounds.

What the preliminary model shows is that with the slightly lower quota of 286,000 pounds you would trigger that smaller size limit more quickly and you would have losses due to that. Now, interestingly enough, this model does not really predict that the quota would be reached. The
reason for that is that we had a quota closure in 2006 and another quota closure in 2007, so the reported landings in the logbook data base are approximately equal to the quota, and 2005 was sort of a low year for the tilefish fishery - they had lower landings than the quota - so on average, for the three-year average, 2005-2007, this model is showing that total landings would be less than the quota. Now in real life we noticed that the fishery in 2008 did close on August $17^{\text {th }}$.

Now we'll move on to red snapper. The red snapper alternatives primarily - well, all of the alternatives would prohibit the harvest and sale of red snapper. Alternatives $3,4,5$ and 6 would prohibit other snapper grouper species either by area or by depth of fishing and area. We can see that Alternatives 3 and 4 would prohibit fishing within a certain depth range, between 98 and 240 feet, in certain areas off the coast of Northeast Florida and Georgia; or, in Alternative 4 it would add some areas off the coast of South Carolina.

Alternatives 5 and 6 would not work by depth. It would just simply prohibit all fishing within certain grids. Alternative 5 has the grids off Northeast Florida and Georgia, and Alternative 6 adds areas off South Carolina. Now there are certain exceptions for people using black sea bass pots or fishing for tilefish or using dive gear.

As with the speckled hind and warsaw grouper alternatives, we can predict beforehand which are going to be the most restrictive, but it is kind of interesting, still, to run through the numbers and see what happens. Now I got all excited when I ran these numbers because I came up with a result that I did not expect, and that's always interesting.

You always ask why do I do these things if I get the answers that I knew I was going to get to start with, so this was a little bit of a twist. I will back off this prediction after I explain to you what the model is saying here. Amendment 16 - recall that we're looking at the extra effects on the commercial fishery after we account for what we think is going to happen with Amendment 16.

Amendment 16 includes a quota for the gag fishery; and when the quota for gag is reached, the entire shallow water grouper fishery is going to be closed. What this model is predicting is that we're going to have restrictions on the harvest of gag and other species, and those restrictions are going to slow down the rate at which we hit the gag quota, and that means the shallow water grouper fishery would stay open a little bit longer than it would under just Amendment 16 only.

Now, I'm going to back off of that. On this graph what that shows is now this blue line right here is the prediction for Amendment 16 no action. The magenta line is the prediction with Amendment 17 no action. The difference between the blue line and the magenta line is the projected effect of Amendment 16, and then these other colored lines are the projected effects of Amendment 17.

Now I didn't show all of the alternatives here because the graph was getting a little cluttered, so I just showed some of the alternatives to illustrate what is going on. You can see that Amendment 17 is going to have negative effects on the fishery until about the fourth quarter, in which case
the fishery stays open just a little bit longer. Actually, with Amendment 17 it wouldn't be quite as bad in the fourth quarter as it would with Amendment 16 only.

Now having explained all that, I'll back off a little bit and say that this model does not account by skipping over the methodological section I didn't go into a lot of detail, but it uses logbook data that are reported by fishermen and we track the effects of the proposed regulations on the reported information that is supplied by fishermen.

One thing the model does not do is account for effort response. We know that when regulations are imposed on fishermen people are going to respond. They're going to try to minimize the effect of the regulation on themselves by doing something a little bit different. This model does not account for that.

You heard Carolyn say yesterday that there was quite a bit of discussion in the SSC about that fact. No doubt I think that the chief way that we can improve this analysis would be to include some type of effort response in how we think fishermen might react to regulations, so there is no doubt about that.

Moving ahead, by the way, this graph was plotting projected landings. Here we're looking at thousands of losses in terms of dollars. This is organized by quarter and once again each bar refers to a different alternative. Alternative 6 was the most restrictive alternative and so it has the longest bar here.

Basically we're looking at losses in the first three quarters and potential gains to the fishery in the fourth quarter, tempered once again by what we know that fishermen are going to respond. This was dollars; this is percentages. Now I'll go on and talk a little bit about the effects reorganized in their presentation to show the effects by region. This is by state of landing; North Carolina, South Carolina, Georgia and Northeast Florida.

We combined these areas because we didn't want to reveal any confidential information; Central and Southeast Florida and Florida Keys. By the way, the dividing line that I chose for Northeast Florida and Central Florida was right around Flagler County. Now, the important thing to show here, what I'd like everyone to see is that this blue bar on the left is no action Amendment 16.

The difference between the first two bars here is what I think is going to be the effect of Amendment 16 before we start talking about 17, so you can see that Amendment 16, which had some pretty hefty cuts in the landings of vermilion snapper and gag, are going to have fairly significant effects on the Carolinas and on Georgia and Northeast Florida and not so much the farther south we go.

Now, Amendment 17 looks like it's not going to have so much effect on South Carolina fishermen. Depending on whether or not the closed areas include those areas off the coast of South Carolina, they either could be not so bad or worse. But look here for Georgia and Northeast Florida; this is landings. Now these are projections of net operating revenues, and you can see that once again it looks like the preponderance of the effects is going to fall within Georgia and Northeast Florida. These are dollars and these are percentages.

The effects on the Georgia and Northeast Florida area are going to be greatest both in absolute magnitude and percentages. Now, sitting through that public hearing last night, I'm little slow on the uptake, but it finally dawned on me that all of the questions about the economic aspects that occurred last night were really different ways of asking the same question, and that question is does the National Marine Fisheries Service really know how severe this impact is going to be on fishermen in this area? I think the answer is yes.

Even without that public hearing last night, if you read through these documents and read through the amendments, you will see that our projections are that there are going to be some pretty serious impacts on people in Georgia and Northeast Florida. Now, I wish we had better data and more up-to-date data perhaps, and I wish in particular for the recreational fishery we didn't have to do some substitutions for information that might be more relevant to the Gulf of Mexico.

But the bottom line is we are projecting that with Alternative 6, for example, there could be really, really substantial reductions in net operating revenues for commercial fishermen in this area. By gear type, this isn't quite as interesting because most of these species are caught with the vertical lines, so naturally the impacts are going to be felt by people who use vertical lines primarily.

I did forget to mention - and I'll mention it now - the simulations that we ran and the results that I presented for the speckled hind and the warsaw grouper and the tilefish alternatives included no action - they assume no action for the red snapper alternatives. Once we know the preferred alternative for red snapper, we'll go back and rerun to give you the full suite of what is going on.

But for the red snapper alternatives here, these are conditioned on the preferred alternatives for the speckled hind and warsaw grouper and tilefish alternatives. The blue line here, which is the no action for the red snapper alternative, we actually have some negative numbers here, and that's because this accounts for the projected results of the alternatives for speckled hind, warsaw grouper and tilefish. These are the percentage results.

The last slide here, there are some caveats that we need to mention. Some of them pertain primarily to the methodological issues. This is a simulation model of fishing behavior. A simulation model is a simplification of reality. The real world is more complex than what we can really handle, and we hope that we can capture the essence of what is really going to happen with our simulation model.

We do not account for changes in fishing patterns that we know are going to happen. We know fishing patterns are going to change; we don't necessarily know exactly how they're going to change, but we know things are going to change. I would also like to note that this analysis used data for 2005,2006 and 2007 for a couple of reasons. In previous amendments we used fiveyear time series of information. This amendment would regulate potentially by depth of fishing, but we didn't start collecting information about depth of fishing until 2005, so we couldn’t go back any farther than that.

When this amendment first started, the data for 2008 were preliminary, so the ITP decided to use the three-year average of 2005-2007, but landings for 2008 are greater than they were in 2005, 2006 or 2007; so if we were to include the information from 2008 the projected losses would be greater than what I'm showing on the graph here right now.

Finally, the last bullet is an oversight on my part that I didn't realize until I heard Rick speak at the SSC meeting. Part of this amendment is specifying ACTs for a number of species, one of which is red grouper, and I forgot to put the ACT on the red grouper fishery. The way the model is working right now it's closing off fishing activities for quite a number of species and red grouper is the one major species that's still open.

Once I throw in the ACT for red grouper, that's going to cap off some of those potential gains in landings. I didn't mention some of those gains in the fourth quarter would have been primarily landings of red grouper. It looked like some people in North Carolina would have been potential beneficiaries. Those potential gains will not be quite as large once we put this ACT on the fishery. That's the end of my prepared discussion, and I'm willing to entertain all sorts of questions and comments.

Mr. Currin: Thank you, Jim, very much. Questions for Jim on the economic analysis? John.
Mr. Wallace: Not so much a question, Jim, but I think a lot of the confusion that I was hearing last night and a lot of times in these economic reports was these models are based on fishing activity and not the land-based impacts that it will have. You were hearing that a lot; you know, do you really know the economic impact it is going to have on the land based?

These models are not run that way. I understand if you're going to talk apples to apples you have got to talk about the fishing activity and there is really no way to even estimate what the land-based activity - the impact on the land-based activity was. That was one of the things that I didn't think that the people last night especially understood that you could not come up with an estimate on land-based impacts.

I don't know how to explain it to them and how you could explain it to them other than I still think that they were looking at numbers and thinking this was all the economic impact that you were considering that was going to happen, but they know that the economic impact or they assume that the economic impact was going to be tenfold when you take into consideration of the land based. I just wanted to bring that up.

Dr. Waters: Well, actually, I'm glad you did bring it up because there are basically two kinds of impacts. What we're focusing on right now are the direct impacts on fishermen themselves, but there are also the indirect impacts. Now, we're using the direct impacts to try to isolate the differences between the alternatives, so you can get an idea of what the effects of the alternatives are.

Now, in the amendment we will have some results of economic input/output models to look at the ripple effects through the economy, but they're going to be results that are primarily generic and they're going to refer either to the ripple effects of the generic commercial fishing industry
or the generic recreational fishing industry. We don't have those models boiled down with the level of detail to really look at the effects of the individual alternatives.

Mr. Robson: That was real interesting information. When we put this together in the amendment, there is limited opportunity to pool all of the economic impacts for both the recreational and commercial analyses because they were fundamentally different kinds of analyses; is that correct?

Dr. Waters: Unfortunately, that is correct, yes.
Mr. Robson: But on this particular analysis, the direct costs, you are going to try to extrapolate out indirect costs in other sectors of the commercial fishery?

Dr. Waters: Well, yes, sort of. What we would like to do eventually is be able to use these direct effects and project them on to the fishery, what are these direct effects and to follow up on the local economies. We're not at that level yet. We just have a broader scale generic model to show the contributions of commercial fishing and recreational fishing to local economies, but we haven't been able to boil it down to particular management alternatives that are being proposed in this amendment.

Mr. Iarocci: That was a very informative report, and, Becky, I hope you can take some of that and maybe get this report and take that to some of the fishermen. It is very important. You heard a lot of that, how it's going to impact these people in the trickle effect last night. I just want to state on the record I have talked to a lot of the council members and the fishermen being affected, and we as a council do understand how this is going to devastate some of these fishermen to a certain point of maybe putting some of them out of business, as they said.

I was just going through this Pew Paper that was just handed out, and also it doesn't have the statement in here that overfishing is damaging to both the natural resources of the South Atlantic Region and to the long-term viability of our fishing industry and our fishing communities. The environmental groups - and we're looking at long term here and not short term.

It is something that's hard for some fishermen to take at this time. Jim, what you're doing and hopefully the council bringing on a social anthropologist to balance and get the information out and get more people like Becky involved in this, we can work together, and people like Pew can move forward with this with a better understanding and an earlier start with SEDAR, also.

Dr. Cheuvront: I've got two things, Jim. When you were referring to tilefish, you were only referring to golden tilefish, right, and not blueline?

Dr. Waters: Correct.
Dr. Cheuvront: And did your model take into account the impact on blueline tilefish in North Carolina through these closures?

Dr. Waters: Yes.

## Dr. Cheuvront: And what was the last year of landings that you had?

Dr. Waters: 2007.
Dr. Cheuvront: Okay, because I can show you through our landings that because of the snowy grouper closer a lot of those guys have moved off into the blueline tilefish fishery. Previously they were catching blueline tilefish as bycatch to the snowy fishery, but now that they're closed out of the snowy fishery they're now directing and targeting on blueline tilefish, and the landings went up from about 50,000 pounds in 2007 to well over 300,000 pounds in 2008.

Granted, blueline tilefish is not as valuable per pound fishery as the snowy grouper, but that's a huge significant impact, and I think we need to see if somehow we can project how our regulations are actually going to change behaviors. When you have something like this, it is going to have a huge significant financial impact that I'm not sure that your models are able to pick up, mainly because you're not sure where people are going to go, but I think we can maybe give some estimates of that.

Also, when you talked about the impacts on the economy, you mentioned direct and indirect. Are you also going to look at induced impacts as well, because frankly when we're looking at impacts, particularly here in this part of Florida and to the northeast, the induced impacts are going to be really huge as well because of the enormous size of the recreational fishing industry in this area?

I knew it was big in North Carolina. Until we started dealing with some of this red snapper stuff - and I knew it was bigger in Florida - I didn't realize the magnitude of which the impact is so much larger in Florida than it is in North Carolina, and I would urge you guys to at least have a discussion or include in there a discussed of the induced impacts; and if you choose not to include them, maybe give us an explanation as to why. I appreciate that; thank you.

Dr. Waters: Actually, we will. I was probably a little loose on my language. I should have said direct impacts and secondary impacts, and then the indirect impacts and induced impacts are just - yes.

Mr. Robson: And getting back again to the different approaches between the recreational analysis and your analysis, I may have missed it but I didn't see in the recreational analysis the kind of percentage change impact that so clearly describes what is going on in this presentation. Is it possible to have a similar kind of presentation or information in the amendment for the recreational analysis even though it was done under a different type of economic model?

Dr. Waters: Yes, I'd say we're probably a lot farther along on the commercial analysis than we are on the recreational analysis, and we can probably reorganize the presentation of that recreational analysis to illustrate some of these effects, yes.

Mr. Currin: Other questions for Jim? Jim, you answered the question I had in reading your material before coming to the meeting regarding those increases in the groupers in the fourth quarter. That was kind of a conundrum. Just based on what I heard last night, I didn't get an
opportunity to mention it to Tony, but I think I heard Tony or you say that there is a project that is getting ready to start to look at the economics of the for-hire sector.

I think he explained that as being primarily charterboat oriented. I'd urge you guys with the offers of cooperation from the headboat industry, at least many of them, to essentially provide you with data. That would reduce tremendously the cost of any sort of effort to go out and collect that data if it is readily available like that and just can be coded and then analyzed as part of that project.

I hope you guys will give that serious consideration, because also reading through not only the economic analysis but Amendment 17 in general the studies that have been on the for-hire sector and the headboat industry in the Atlantic are old when they exist at all, and it's really, really time for an update on that stuff. We're looking at studies that were done in 1999, some of them. I am glad to see that effort move.

Dr. Waters: Yes, that's exactly right. In fact, the fellow who is going to do this study is the same fellow who did that 1999 study, and there should be a lot of continuity between that study and this one so that we can compare changes in how the fishery has evolved over time. I wish we could do this more frequently, but it doesn't always work out that way.

Mr. Currin: And it's obvious you guys have got the same problem that the biologists have, but you've got it in spades, I guess, in our region. Anything else for Jim? All right, thank you very much. John, Rick said that you were not going to provide the Closed Area Evaluation 2 for us this morning.

Mr. Carmichael: That is correct, we presented that at the SSC in conjunction with the work that had been done through the Regional Office. What Andy presented you brings all of that stuff really together in one place. What we had worked on is very similar to what you guys had seen in March, the area-based approach, and had been working to refine that, so I think from this point forward we're going to try to keep these things together.

Mr. Currin: Thank you; Andy did a great job going through that yesterday. Bonnie, are you also going to provide us with the Red Snapper Monitoring Plan Overview that Erik was going to provide?

Dr. Ponwith: Yes, I'd be happy to talk you through that. A discussion of that was included in the SSC Report because, similar to John's situation, that report was presented to the SSC, but I'm happy to open that up a second time and give you a thumbnail sketch of what the outcome of that report was and see if you had any questions, if you would find that useful.

Mr. Currin: We'll see if anybody has any questions. Again, Carolyn did provide us with the SSC's assessment of that. As you know, the committee felt pretty strongly a meeting or two ago about trying to involve the for-hire sector in developing a monitoring plan, which we know is necessary.

That analysis has been done, and at least to date the recommendation I think from the Science Center personnel as well as from the SSC is that the best bang for the buck is a fisheriesindependent monitoring plan, establishing that. We will have an opportunity to discuss that further as we go through 17 or wherever it comes in. Are there any questions for Bonnie at this point on the monitoring plan?

All right, Rick, are we ready to go? We've got Amendment 17 and they have provided us with the economic analysis to date and the projections and the information on the monitoring plan, and we've got to make some decisions on 17 and how we proceed with this.

Mr. DeVictor: Just to refresh everyone's memory, Amendment 17 deals with ten species currently undergoing overfishing. There are four primary objectives to the amendment: to specify the catch limit for these species where needed; to specify the AMs where needed; also assure that total mortality does not exceed the ACL, so you guys go through and look at the current regulations and look at the ACLs that are specified and determine if those regulations will keep you at that ACL or below.

That gets to the fourth objection, which is red snapper, which is to end overfishing of red snapper and implement a rebuilding plan as it is overfished. As we typically do, we go through the amendment action by action, so I'll lead you through that and walk you through that. We have preferred for some actions and not for some of them.

Starting with speckled hind and warsaw grouper, there currently are no AMs or ACLs for these two species. If you recall, the current SSC recommendation is an acceptable biological catch or ABC limit of zero. They clarify that is just for directed harvest and not discards. There are no AMs and no ACLs and ABC equals zero.

The current regulations are one per vessel per trip with no sale. Alternative 1 is the status quo. Alternative 2 would establish an ACL of zero. In fact, all five of these alternatives would establish an ACL of zero. Alternative 2 would prohibit all commercial and recreational fishing for, possession and retention of speckled hind and warsaw grouper.

Alternative 3 prohibits all harvest of the deepwater species, and they're listed after that alternative. That prohibition would occur throughout the entire EEZ for both sectors; whereas Alternative 2 is just for two species. Alternative 4 adds this idea of allowing golden tilefish fishing between a 100 meter depth and 300 meter depth. These are shown on maps in the following pages.

Then Alternative 5 includes that depth range to allow tilefish fishing, but specifies that this prohibition on retention of deepwater species is beyond 240 feet. Alternative 5 is the current preferred alternative. Just a couple of things I would like to point out. First of all, the team had a couple of conference calls concerning these alternatives.

We have added for your consideration Subalternative 4A and 4B, and this would require VMS by a vessel fishing for golden tilefish. We have heard quite a few comments from recreational
fishermen. I don't think the team's intention was to have this requirement for recreational fishing; that we would clarify in the document it would be for commercial only.

Number one, we want to see if you concur with team that these should be added for consideration under Alternative 4 and Alternative 5; and also if you have a preferred for those two. Finally, we heard comment last night about that 100 meter to 300 meter depth range. In fact, the comment came from the president of the Hundred Fathom Fishing Club. I spoke to him out in the hallway, and his comment was that they fish between 550 and 1,250 foot depth.

That translates to 167 meters to 381 meters. The 100 to 300 covers it roughly, but his comment was that he fishes beyond the 300 meters. You also may want to have discussion if you want to change that depth range.

Mr. Currin: Comments or questions about the proposals from the staff about VMS and also this concern about this depth range that is established for golden tile. Roy.

Dr. Crabtree: Rick, I guess I'm having trouble understanding the rationale for specifying the depth range, particularly the deep end of it. Why would we only want them to fish out to 300 and not any deeper to begin with?

Mr. DeVictor: There is some concern if they fish beyond 300 meters of approaching the deepwater corals. We're specifying the Deepwater Coral HAPC, so I think that is one concern.

Dr. Crabtree: But we aren't going to allow them fish for golden tile inside the Deepwater Coral HAPCs, right.

Mr. DeVictor: No, but if they go right up against it I think that there is a concern the closer that they get to those coral habitats, but, no, they are not allowed to fish in the HAPCs.

Dr. Crabtree: Okay, and then the other thing, based on what I heard last night from those guys, they say they're not catching warsaw and speckled hind, and it appears to me that the document backs them up on that. I'm looking where it says speckled hind and warsaw grouper are rarely taken on trips with golden tilefish, so it's really, one, not clear to me that we need that depth range to begin with; and, two, it's not clear to me that we need to be concerned about the golden tilefish fishery at least in the context of this action, which is dealing with speckled hind and warsaw grouper.

I would like to hear some discussion from the council based on the testimony we've got and what our document says it looks to me like we don't need to deal with golden tilefish in this particular context, and we ought to leave those guys out of it, maybe. Am I missing anything, Rick, that is the conclusion of the document, isn't it?

Mr. Currin: Roy, my recollection of this is that at least in the past in the golden tile longline fishery, because of the extent of those longlines, that those guys did - on occasion those lines would extend across some rock areas while intersecting mud on both sides. There was or is
some bycatch of snowies as well as I presume warsaw and speckled hind, although it is not very common with those latitude species. That was the concern.

Dr. Crabtree: Right, and I'm not saying there's not some. It's just our own document seems to indicate that it's not enough, and so I guess what I'm looking at right now is do the benefits of this justify the cost, and I'm not at all sure that they do at this point.

Mr. Waugh: Remember, we're setting the ACL equal to zero for speckled hind and warsaw. We recognize there is going to be mortality in the midshelf fishery. How much we don't know. The intent of coming up with an allowable golden tilefish area is to define an area that comprises the mud habitat where if they fish within that area the likelihood of having a bycatch of speckled hind and warsaw is very low.

When you look at the catch distribution in the past of trips that have caught golden tilefish, there is very limited speckled hind and warsaw because for the most part those trips are taking place in the mud bottom. When you look at the cumulative impacts of regulations up to and including Amendment 17, once these quotas start to fill there is going to be a lot of effort shifting.

The concern is that effort shift is going to shift into golden tilefish and the grounds will be become crowded, and you're going to have fishing on periphery of the mud where those sets and the fishing are going to get into the hard bottom and your bycatch of speckled hind and warsaw is going to increase. That's the rationale.

Dr. Crabtree: I guess the counter to that, though, it seems to me is that we've got a hard quota, and you're talking about the commercial fishery largely, I think. It seems to me if much effort did shift in the golden tile the quota would be caught so quickly the fishery would be shut down. I don't know that a whole lot of effort could shift into that fishery. I mean, they're already closed down. Jack, when are we closing golden tile by and large and putting the trip limit in place at least?

Dr. McGovern: May.
Dr. Crabtree: May, so the longline portion of it is pretty well over by May; and if you shifted much more effort into that I'm just not sure that it would be worth it to anybody, really, to shift over.

Mr. Robson: I was going to ask some of the same questions that Roy asked in trying to look at any way to provide for the golden tilefish fishery, particularly the level that it occurs in South Florida and Central Florida, whether or not we even need to have that defined area. Particularly what I heard was that there may additional mud bottom areas beyond that defined area limit that we have, why would you exclude it?

Mr. Currin: Well, if it's the desire of the committee we can add an alternative that addresses both Mark's and Roy's concern. Brian.

Dr. Cheuvront: And to mix it up a little bit more, we've got the issue of the letter from the MidAtlantic Council regarding basically our Preferred Alternative 5, which in that letter they state that the black sea bass fishery north of Cape Hatteras typically occurs in that area beyond that 240 feet.

Now, the wording on here says that we prohibit possession and retention for all deepwater snapper species, but the way we're going to do it is we're basically closing bottom fishing except for golden tilefish beyond the depth at 240 feet. Now, we don't know really what the bycatch is of the speckled hind and warsaw grouper since the guys aren't landing them and we're not capturing that.

But in looking at again our landings from North Carolina in the EEZ north of Cape Hatteras, we're basically catching two things now; the black sea bass and the blueline tilefish. We don't really have any restrictions on blueline tilefish; and since we have closed the guys out of the snowy grouper fishery, I mean last year, in 2008, we had 6,000 pounds of snowy grouper landed according to our trip ticket program.

But it was an interesting shift and you can see it in the landings in 2006 when snowy grouper was about 14,000 pounds and the blueline tilefish was 107,000 pounds. What was happening was that the guys were targeting on those snowy groupers and they were catching blueline tilefish. If you look at the next year when snowy grouper went down to about 4,000 pounds and blueline tilefish then dropped to about 25,000 pounds, they hadn't adjusted yet.

But when you get to 2008 they discovered there were places where they could basically get the blueline tilefish without hurting the snowy grouper because, like I said, in 2008 there were 6,000 pounds of snowy grouper, but we're showing 380,000 of blueline tilefish were caught last year. Now, we don't have any stock assessments or anything that say that the stock is in trouble yet we can see that the fishermen are adapting to the regulations that have gone on.

In absence of any data to tell us that we have any problems I'm still not in favor of shutting down this deepwater fishery. If we have to compromise on this, I would be more willing to discuss a closure at the Cape Hatteras Line, that 35-15 longitude, and just leave that Mid-Atlantic Black Sea Bass Fishery sort of out of this. Anyway, I've got some difficulty with this closure.

Dr. Crabtree: Well, I'm on the fence about blueline tilefish because it does sound to me like there is potential for bycatch in that fishery, how much of a problem there is. But, my take on this is we really don't have - I don't see any reason why we would consider closing golden tile down.

I guess my suggestion would be to take Alternative 3 that's in the document now, but remove golden tile from that alternative because it just doesn't seem reasonable to me to consider closing the golden tile fishery down in order to reduce discards of speckled hind and warsaw grouper. Rick, that way we wouldn't add another alternative to it.

I would like to have a better feel for how much of an issue we have with golden tile and whether it's a problem. I think we need to understand that we're not going to eliminate all of the bycatch
of these, but what I hope we're going to do through this is get a substantial reduction in the bycatch that is occurring in these.

Do we have in here any kind of analysis to look at the blueline tilefish fishery that could really show us how much bycatch of these species is occurring and the extent of this fishery, so we could get a better feel for how much of an issue blueline tile is?

Dr. Cheuvront: Roy, this is a changing fishery right now for blueline in North Carolina. I've talked with a couple of fishermen, and they explained to me that they have shifted to a different bottom type from where they were catching the - apparently the blueline tilefish are less selective than the snowy grouper are in the bottom type that they prefer to hang around.

Much of the areas where they are catching the blueline tilefish now they describe as being much more similar to the golden tilefish, the muddy bottom. I have nothing to go on other than what the fishermen have told me; and if that is really the case then the blueline tilefish fishery is probably less likely to encounter the kitty mitchells and the warsaw groupers as well, but there is no empirical data that I'm aware of.

Mr. Currin: Well, I happened to be up off of Hatteras last week. The trolling was slow and the crowd I was riding on the boat with fishing - they were fishing; I was watching - the captain decided to make a drop in 110 fathoms off of there. We encountered some very nice gray tilefish, bluelines, and we also encountered some snowy groupers, more snowy groupers than we did tilefish.

I only raise that because I think to make the assumption that the guys can totally avoid - and they don't have to totally avoid; they’ve got a hundred pound trip limit to date on the snowies. I think there is a risk, I guess, that there would be enhanced encounters or increasing encounters with snowy groupers in that grayline tilefish.

Dr. Cheuvront: To that point, I understand what you're saying, Mac, because the fishermen aren't saying that they can still go out and catch snowy groupers and blueline tilefish together. They're telling me they know where to go where the bottom is different, and they are able to where the snowy groupers are not, but they can still encounter the gray tilefish.

The original condition that you're describing still exists. They have gone out and found other fishing areas where they're able to get the gray tilefish without getting into the snowies. Again, I have not been out there myself and I don't have empirical data. I'm just going by what the fishermen have told me.

Mr. Currin: I understand. Mark.
Mr. Robson: Getting back to golden tilefish just to make sure I understand the situation, what we're talking about, too, is we have a reduced hard quota on golden tile. We're talking about closing both commercial and recreational fishing once that quota is met, as I recall, in the alternative.

We heard that at least in, was it August - it was 2008 the fishery did close. So if recreational fishing also ends when the commercial quota is met, that's going to reduce the amount of effort going on for that species and also reduce the amount of potential bycatch that might occur for the deepwater species.

Mr. Currin: Very true. Rick, did you find some information to address Roy's question?
Mr. DeVictor: Yes, to Roy's comment of what trip blueline is caught, we do have tables in the document that look at data through '04 to '06 at species that caught at least one pound of warsaw grouper, for example, and you can see in these tables we have headboat, commercial and MRFSS on what species are caught with what.

On warsaw grouper you can see - and Jack can correct me if I'm wrong. He put these tables together - 55 percent of the trips caught blueline tilefish with warsaw grouper; then with speckled hind, 8 percent of the trips. Then there are headboat trips; with warsaw grouper I don't see much there. Headboat trips that caught one pound of speckled hind, I don’t see blueline listed.

Then there is MRFSS data where you basically have vermilion snappers and what are the high species caught with those. Then also to Roy's comment about Alternative 3, we would just have to have a discussion about the 240 foot depth, which is in your current preferred alternative. Again, that 240 foot depth, the prohibition would go seaward of that line, and so that would allow you to retain snowy grouper and some of these species, speckled hind and warsaw on the shelf edge. So the question would be if you take golden tilefish out of the language of Alternative 3, do you want to apply that 240 foot depth range to that, too?

Dr. Crabtree: I guess the way I would like to see it looked at - and I think Jack could do that - I would like to see, all right, under status quo here is the level of discards we would expect to have. Then if we closed all of these deepwater species except golden tile and blueline tile, what level of discards for snowy, warsaw and speckled hind would we expect to see. Then if we closed blueline tile how much additional reduction in discards would we like to see.

Do you follow what I'm asking for? I would like to see how much gain do we get on discards by including blueline tile in this closure so that we can judge whether or not it's worth it, because it sounds to me at least up in North Carolina there are people fishing for this thing, and I want to see the gains we get by doing it are sufficient.

I think I'm prepared to at least make a motion that on Alternative 3 we delete golden tilefish from that. I just don't see how it would be reasonable for us to close the golden tilefish fishery down entirely because everything I'm seeing indicates that they just don't have significant numbers of discards.

Mr. Currin: No desire to add a landward depth boundary in association with that? Roy, do you have no desire to add a minimum depth?

Dr. Crabtree: I see no need for a minimum depth in any of this stuff. I'm at a loss as to why we're doing that. I think it creates big enforcement problems. We're taking other actions to deal with the deepwater coral, so I just don't see a need for the depth restrictions personally.

Mr. Currin: Well, I understand your rationale for that eastern or the deepness value, but the shoremost depth to 240 seems to make some sense to me, but that's fine. Roy's motion is to change Alternative 3 by eliminating golden tile from the list of prohibited deepwater species. Is there a second? Seconded by Mark. Discussion on the motion? Tom.

Mr. Swatzel: It’s just a question, and that is why wouldn’t you want to basically eliminate the references to golden tile in all the alternatives? If we're not thinking that fishing for golden tile is going to have an impact on warsaw or speckled hind, why would we want to mention it in any of the alternatives?

Mr. Currin: Well, some of them actually define where the golden tile can occur by the depth ranges, Tom, so there's obviously some reason to keep them there; but your point about the other alternatives, I've heard no intent by anybody on the committee or the council to prohibit golden tile fishing as a part of this amendment. I think we’ve got a quota that we can track and the management process seems to work well. Roy.

Dr. Crabtree: Tom may be right about that, that we just don't need to deal with golden tile fish here. I guess where I'm leaning towards is some consideration of changing preferreds to Alternative 3. I'm not prepared to remove blueline from it yet. I would like to see some more analysis of that. I would like to hear how the other committee members feel about Tom's idea because I'm not sure we couldn't just take golden tile out of this whole action.

Mr. Currin: Other thoughts? Mark.
Mr. Robson: I think I would support thinking in those terms. I'm trying to reconcile our requirements under Magnuson-Stevens to address what we need to address particularly for the overfishing deepwater grouper, but we’ve also seen some very significant economic impacts that are going to occur and any particular species or fishery that we can continue to allow is going to at least help some to mitigate those economic impacts as we have seen.

I don't know that it's necessary. We've got the quota in place for golden tile. We're talking about controlling that harvest both recreationally and commercially with that quota, and I think that should in my mind take care of things.

Mr. Currin: Keep in mind we have a motion on the floor here, so let's try to discuss this motion right now. There has been a suggestion that perhaps there is another motion somebody wants to make, but let's deal with the motion that we have on the floor, and that is to change Alternative 3 by eliminating golden tile unless you want to withdraw that because you see it going somewhere else.

Dr. Crabtree: I think if Tom or Mark wanted to make a substitute motion to just remove golden tile out of it, they could certainly do that, and I might support them on that.

Mr. Currin: All right, let's just try to focus the discussion around this motion as best we can so that we can deal with it. David.

Mr. Cupka: I was just going to say I would be inclined to go along with what is being suggested for all the reasons that have been given, but in addition it would simplify the action, too, I think if we did that; maybe take out some of the alternatives. It would help with the analysis and whatnot.

Dr. Cheuvront: Actually, if we're going to keep the discussion on this motion, I've got something that I would like to follow up after we get through the motion.

Mr. Munden: My question is for Dr. Crabtree. If this motion passes do you intend for this to be the preferred alternative?

Dr. Crabtree: Well, I think I would be inclined to do that. I guess right now I want to see if Mark was getting ready to make a substitute motion. Then we could deal with that and then decide about the preferred.

Mr. Robson: Yes, I want to offer a substitute motion that we remove the golden tilefish from inclusion in these alternatives. I'm still a little confused if we want to do that and take it out of Alternative 3 if the same motion would take it out of the other alternatives or remove it from consideration. I guess I'm looking for some procedural help here because I get confused.

Mr. Currin: Well, I'm not sure I can help you without looking at all of it and what the implications are. Roy.

Dr. Crabtree: Well, Rick can probably help us on that, but what I think it does is it eliminates all the 100 to 300 meters, and it eliminates the VMS alternatives. It significantly I think reduces what all are in these and probably the greatest economic impact based on everything we have seen of this whole action is because of the effects on the golden tilefish. I think Rick can confirm it for us, but it takes those allowable fishing areas out and the VMS out, so it really simplifies this whole thing quite a bit; doesn't it?

Mr. DeVictor: That is correct, and we'll take it out of the language. Where it says "prohibit all fishing for" and we will take the words "golden tilefish" out of the parentheses, and then we will take the 100 meter to 300 meter and the VMS.

Mr. Currin: We're discussing the substitute motion, but it doesn't have a second yet. Seconded by David.

Mr. Robson: And just to clarify what Rick just went through in terms of what would be removed from the alternatives is what I would offer as a substitute motion.

Mr. Currin: And my other concern was how it impacted all the alternatives and how many became similar in that, but it looks like we've still got a reasonable range if we do that. Gregg.

Mr. Waugh: I think the bottom line of this action would be to remove Alternatives 4 and 5. Those would no longer be in there because those have to do with - Alternative 4 creates the allowable area for golden tile; 4A requires VMS. Alternative 5 does the same thing. Those two alternatives just disappear so you would have Alternatives 1,2 and 3, and I would presume we keep golden tilefish in the status quo alternative, but then you would be left with Alternatives 1 , 2 and 3.

Mr. Currin: Thank you, Gregg. Mark.
Mr. Robson: But Alternative 5 is the one that includes the 240 line, right?
Mr. Currin: Yes.
Mr. Waugh: But you're deleting the discussion and the intent for addressing golden tile, so what Alternative 5 does is create an allowable area for harvesting golden tilefish, so that alternative just goes away.

Dr. Crabtree: Well, I don't think it does, Gregg, because Alternative 5 prohibits fishing beyond the depth of 240 feet for all those grouper species. It does eliminate that next part that allows the harvest area for golden tile, but it does prohibit fishing for all those outside a depth of 240, doesn't it, so it is different than Alternative 3, I believe. I think you're right that Alternative 4 goes away because it becomes identical to Alternative 3. I also think golden tile would come out of the status quo since it's just not even part of this action anymore. Am I right about that, Rick?

Mr. DeVictor: Yes, if I read this right I believe that 3 and 4 would end up being the same, so you would be left with 1 and Alternative 2 and then Alternative 5 - I'm sorry, 1, 2, 3 and 5.

Mr. Robson: And 5 would be essentially the same except that it would also remove the reference to the golden tilefish closure?

Mr. Currin: Correct. Does everybody understand what the substitute motion would do? Roy.
Dr. Crabtree: Yes, I think I do and then where that leaves us is what is now our preferred is less restrictive than Alternative 3 because it only prohibits possession and fishing beyond a depth of 240 meters; whereas, Alternative 3 prohibits it across the board. I think I understand what the motion does so I'm ready to vote.

Mr. Currin: Any questions about the motion; I want to make sure everybody is clear on it.
Mr. Harris: Mr. Chairman, the only question I have is with respect to removing golden tile from Alternative 1, status quo. I'm not sure I understand why we remove that. If it's status quo what does matter whether it's removed or not?

Dr. Crabtree: Well, I don't know that it does, but since none of the other alternatives have any impact on golden tile it seems to me it wouldn't be part of it just as gag or other species are not part of status quo. This just becomes an action that deals with it, but I'm not worried about that.

Rick and all the lawyers can figure out what the status quo is after the fact. I'm more concerned about what we're doing here.

Mr. DeVictor: And the next action actually deals with golden tilefish, the ACLs and AMs.
Mr. Currin: Is everybody clear on what the motion does? Further discussion on the motion?
Mr. Geiger: I hate to be a nitpicker, but instead of just inclusion in these alternatives, could we be a little more specific on what we're doing in terms of just removing golden tilefish from inclusion in these alternatives. If it's okay with everybody, that's fine.

Mr. Currin: Would being specific as referring to the Section Number 4.1, issues regarding - or section on speckled hind and warsaw grouper; would that help clarify it some for you or do you want the specific for -

Mr. Geiger: Yes, in two months, when you go back and read the motions, it might help to know what these were.

Dr. Crabtree: I think George is right, we ought to clarify it. Mark ought to be a little more specific in his motion by referencing the action that we're talking about so the record is clear.

Mr. Currin: That's fine, George, you had some good points.
Mr. Robson: So do you want me to clarify my substitute motion? Rick I think had hit all the issues, but with respect to the speckled hind and warsaw grouper my motion is to remove golden tilefish from being referenced in Alternative 3. We would eliminate Alternative 4 and we remove reference to the allowable harvest area for golden tilefish from $\mathbf{1 0 0}$ meters to $\mathbf{3 0 0}$ meters depth that is currently in Alternative 5. Also, the motion is to clarify that by removing golden tilefish from these alternatives - the subalternatives for 4 and 5 would also be removed that specify VMS.

Mr. Currin: Okay, just for my benefit, Mark your intent is to allow that statement in Alternative 5 to remain; the statement beyond a depth of 240 feet?

Mr. Robson: Yes.
Mr. Currin: All right, everybody clear? We got a second to the motion from David. Any further discussion of the motion? Any objection to the motion? I see none and now the substitute motion becomes the main motion. Is there discussion of the motion? Is there objection to the motion? I see none. Roy.

Dr. Crabtree: So now I guess we talk about the preferred, and the problem I have with our current preferred is I think it's going to be very difficult to enforce it. I think we need to be clear, too, that we're going to have to draw a line that's going to have way points and all those things.

We're basically saying outside of 40 fathoms you can't fish for or have any of these deepwater species, but then on the other side of the line you can. Since a lot of enforcement of these types of things is dockside, it really is putting the onus of at-sea enforcement on these. I think we ought to have some discussion about that because Alternative 3 would certainly be much more enforceable because you could enforce it at the dock.

I still want to come back to Brian's issue, but I want to see Jack's analysis because I think there is some chance we may come in and decide blueline tilefish doesn't really need to be part of this either. I guess I would like to hear some discussion from the committee about the current preferred versus Alternative 3 which just closes these, and is there enough gain by closing them only outside 40 fathoms to justify all the enforcement problems it's going to create for us.

Mr. Currin: Well, my perspective on that, Roy, is regardless of what we do we've got the same enforcement problems out there.

Dr. Crabtree: Well, I don't think that's correct, though, because in one case you can enforce it dockside. In the other case you're going to have to enforce it at sea. I think all of our enforcement folks are going to tell you that enforcing things at sea is vastly more difficult than something that they can enforce at the dock.

Mr. Currin: And I appreciate that and I understand that. My reference was to the enforcement effort and capability offshore, at sea, so I understand that there is an advantage there if it is totally prohibited. The disadvantage to me is that we know that we're going to have some encounter with snowy grouper and all of these species up on the shelf.

If there is a total prohibition of those, then they're going to have to go overboard and float off and whatever else is going to happen to them. I don't know; I guess I have a little more faith in people's willingness to cooperate and participate in fishing in a lawful manner, and there is a certain amount of trust that we have to rely upon for people to make themselves aware of the regulations and abide by the regulations. I fully understand not everybody does that. Other comments. Mark.

Mr. Robson: Well, I was going to echo the same concern about enforcement and having to establish another depth line. My understanding and, of course, our agency's law enforcement division will be expected to help enforce these areas. It becomes an at-sea enforcement requirement if you have a specified area.

I guess I am a little concerned. I'm not quite prepared to change the preferred, but I am a little concerned about what was raised as far as the possible encounter particularly for snowy grouper because right now we still have some limited allowance for that in terms of bycatch. If we go to Alternative 3 and that becomes what is implemented, that will completely eliminate any allowable harvest of snowy grouper.

Dr. Cheuvront: Yes, that was one of the things or points I wanted to make that Mark had. We've already got measures in place. We have reduced the amount of snowy grouper landings. My guess is that snowy grouper bycatch of these species is probably rather low at this point. I
also want to go back to a point that was made several moments ago when we first started the last set of motions when Roy started something and then he jumped into his motion that I had wanted to respond to.

That was when he was asking Rick to look at the landings of the blueline tilefish bycatch on the kitty mitchells and the warsaws. Rick, please make sure you include 2008 data in there because the fishery has changed. If you go back and look at that, you're going to look at a fishery that was directed on snowies and the blueline tilefish was bycatch to the snowy fishery.

That has changed. Most of the snowy that is landed is bycatch to the blueline tilefish fishery. We've had a significant change that is going to impact your analysis. Also, really, until we get that kind of analysis back and we can deal with the snowy issue, there is really no alternative here that I can support other than Alternative 2.

Mr. DeVictor: And this is where it gets a bit confusing; if you go to Action 4 for snowy grouper and we have an action in there to set one snowy per vessel, so Alternative 2 here would completely eliminate snowy grouper harvest and later on you're saying one per vessel, so we have just got to keep that mind.

Mr. Currin: Right. Other discussion, other comments? Currently we have the new improved Alternative 5 I guess was our preferred, which has a depth boundary on it. Some discussion about whether that's necessary, beneficial; any desire to change anything at this point? I see none. Dr. Crabtree.

Dr. Crabtree: Well, I'm on the fence about moving to make Alternative 3 the preferred, but based on the discussion I've just heard I think a motion to do that likely wouldn't pass at this point, so I'm going to hold off. I do think we need to instruct staff, though, to come into Alternative 5 and draw a line with way points. They will have to figure that out, but what I don't want to have happen is that we don't deal with that until we get to the proposed rule stage and then we get into the whole issue that we didn't see this.

I would like to see them go ahead and construct that line prior to the next meeting; so that when we go to public hearing we've laid out the line that we're comfortable with. Then I would also ask that staff prepare an analysis that looks at blueline tile; and as I discussed a little bit ago, the effects of those discards so that we can come back to the issue of whether we need to deal with blueline tile or not. I'm okay with those things and with letting the preferred, and I am going to hold off on any motion, but I do still have reservations about enforceability that we're going to have to deal with.

Mr. Robson: Did I hear that the staff would be able to give us some analysis. If Alternative 3 were the preferred, will we be able to look at how that would affect the current strategy for snowy grouper in terms of will we be able to look at any - I mean, it's pretty much all or nothing. If Alternative 3 is selected what - well, it would completely change the snowy grouper.

Dr. Crabtree: Well, if we choose Alternative 3, then presumably the ACL for snowy grouper goes to zero and the bag limit alternatives become moot essentially. That's the thing and that's
the tough spot we're in. I don't really want to go to a zero on snowy grouper. I think at some point with this we have to think about are you really getting anything; because, based on the things we put in place at least from the commercial side, I think snowy grouper is just incidental catch now.

Well, if we go to zero on all of this, okay, they're not going to bring it in, but they're going to just toss them over the side, and so I don't think you'd get anymore fishing mortality reduction and you don't have any fish coming in that we could have potentially sampled. That's the tough spot that we're in with this.

There is a point at which you're just not going to be able to reduce the fishing mortality rates or the discards anymore than where you are unless you're willing to just shut absolutely everything down, and nobody wants to have to do that. I think we all kind of struggle with do we really get any gains if we restrict any further.

I guess I want to see the staff do as good a job as they can of analyzing those things so that the next time we sit down with a big crowd of fishermen we don't get them jumping all over us because we're doing things that aren't going to be effective and they're throwing dead fish over the side. I think, Rick, you all need to really look at that as hard as you can.

Mr. Robson: And in following along this discussion, I mean, do we need to look at an alternative that is similar to three but removes snowy grouper? I'm just asking a question. I'm not sure I'm prepared to recommend that.

Mr. Currin: That's a rhetorical question at this point, then? I think the answer to that would require some thought. Is everybody okay at this point with the alternatives that we have under the speckled hind and warsaw action with the directions to staff that were outlined by Dr. Crabtree regarding these way points and blueline tile issues and discards associated with that fishery? Well, let's move on, then.

Mr. DeVictor: Okay, next is golden tilefish. This is on PDF Page 197 or 172 in the hard copy. Okay, what is currently in place for golden tilefish, we have a commercial ACL at the Fmsy level. There has been some interest by the council to incorporate management uncertainty and possibly lower that to the yield at Foy. There is a minor recreational component to the catch which has been usually less than 9 percent over the course of the last two years.

Then you have a relatively high PSE so that presents a challenge to the council. It has been around 40 to 60 percent, so it's definitely difficult to monitor the recreational component of the ACL for this species. Encounters are low, landings are small, so that becomes a challenge on what to do with the recreational ACL and tracking it.

Going through the alternatives, we have Alternative 1, which is status quo. Alternative 2 would establish the commercial ACL, the quota at the Foy, so that's what I was just talking about where it is currently at the Fmsy level. This would lower that to the Foy. There is the value of what it would change to in the paragraph below.

The team had a question about that where we all think that alternative by itself would satisfy the purpose and need where it wouldn't establish a recreational ACL or AM. Alternative 3 would establish a single ACL, so commercial and recreational. What you would do with this alternative is you would track both the commercial and recreational catch.

That's where the concern comes in where if you recall in '06 there was a huge jump in landings where the recreational harvest accounted for 40 percent of the total harvest. If you use recreational landings to track this one ACL you could go over pretty quickly and it could be due to an artifact of the sampling. There is a concern there when you get these high golden tilefish landings recreationally.

Alternative 4 would establish a recreational AM; that once you hit this single ACL, you would switch from one golden tilefish per day to one per vessel. Finally, the preferred alternative would establish that commercial quota at the Foy, so that's similar to Alternative 2, but what you would do is the AM would be to close the commercial and recreational fishery once you reached this single ACL.

On Alternate 5 you would not track the recreational landings in this single ACL. What we're looking for is Alternative 5 still your preferred alternative. I think you have two options for Alternative 2. To satisfy the team's concern, you could either move this to the appendix and say that it doesn't satisfy the purpose and need as it doesn't specify the recreational AM, or you could add on there a line that says if it is exceeded as far as the recreational AM side, you would reduce the length of the fishing year. That's the current preferred alternative for snowy, so it may be justifiable to add that language and keep that alternative.

Mr. Currin: What is your pleasure, folks, on this? Let’s deal with Alternative 2. It needs to be fixed. Rick has made a suggestion that would mirror the similar alternative for snowy or it could be removed because it doesn't have accountability measures associated with it. Mark.

Mr. Robson: I would move that we go with the staff's suggestion to set it up for a recreational AM such that it mirrors the snowy grouper provision.

Mr. Currin: Motion by Mark to modify this alternative similar to - second by Brian. Discussion or questions. I have a question. Rick, would this require in-season monitoring of the recreational golden tile catch?

Mr. DeVictor: That alternative would not, I don't believe would track the recreational harvest. Some of these alternatives track the commercial and recreational harvest; some just the commercial. Well, no, you would see each year, if you do exceed it, at the end of the year would go ahead and reduce the length of the following fishing year, so I think you could track it as you currently do where there is a two-month delay on receiving the recreational landings. You would just see at the end of the fishing year if you have exceeded it.

Mr. Currin: Well, it’s a single ACL. We don't have the recreational landings until after the fishing year is over. Does that imply that the recreational - if the commercial season, as it has typically closed very early, this would allow the recreational fishery to continue throughout the
year and then we would have to adjust it in some way, so the second season I guess, when they went over, we would have to establish a season as an accountability measure just for the recreational fishery?

Mr. DeVictor: Right.
Mr. Currin: Okay, I'm clear on what it does, anyway.
Mr. DeVictor: And looking at Alternative 2, Alternative 2 does not specify a recreational ACL, so I think that is a problem there where we would be establishing an AM without a specific recreational ACL. You know, the concern here is the recreational catch has been around 2 percent for golden tilefish, so what would a recreational ACL do for you?

Dr. Crabtree: One thing that is a little odd to me, when you go to the next action, which is snowy grouper, there we have a preferred that sets up a recreational ACL and an AM and does the three-year averaging and all that, and it's not really clear to me why in golden tile, if that's the route you wanted to go, why we wouldn't just do it the same as what we're doing with snowy.

I mean, I think the estimates have similar CVs and similar problems. Now, I can understand why our preferred on golden tile is different because we have a commercial quota and it is caught, but with snowy we have a commercial quota but we set a trip limit so low that it's really not caught, so that's the distinction to it. If we want to go into Alternative 2 and set a recreational ACL and recreational AM, it seems like we could just pattern it off of snowy grouper.

Mr. Currin: I don't know what the implications are for your motion there, Mark, but it doesn't seem like it's going to be as simple as we thought.

Mr. Robson: Yes, I may want to withdraw my motion.
Mr. Currin: Is that okay with you, Brian, as the seconder? The motion is withdrawn.
Dr. Cheuvront: I was going to speak in regards to what Roy said. I think the way to deal with golden tilefish and the recreational fishery, if we really want to go this route, is to have an ACL and an AM and just figure out some way to mirror it like snowy grouper. It is the fairest thing to do.

I think the concern might be that we're looking at putting all these caps and things particularly on the commercial fishing because we know that as we change some of these commercial fishing allowable practices that the fishermen are going to change their behavior. Well, the recreational fishermen are going to do the same thing; and if we didn't have some kind of an ACL on the recreational fishery, we could have an explosive expansion in that fishery. I don't know, but the potential would be there and we would not have control over that. I think we would have to do something for an ACL there.

Mr. Currin: Well, I think you're right and any alternatives that would allow the recreational fishery to continue after the commercial quota was caught, there would be that potential. In
recent years with the commercial quota being met, more or less, in May this year or June or August last year, that prohibits some of that from occurring perhaps, but I understand your concern and share it. Roy.

Dr. Crabtree: Yes, it's a concern, but the other part of the golden tile and when the quota is caught and all that is remember in Amendment 18 I think we're changing the fishing year. Is the proposal in Amendment 18 on the golden tile fishing year to have it start in June? Rick, do you recall?

Mr. DeVictor: There is a set of alternatives, but I don't know if that's your preferred at this time.
Mr. Currin: Yes, I think there are two or three different choices.
Dr. Crabtree: They're telling me there is no preferred at this point, but there are alternatives to change that fishing year, which if we stay with our preferred will change when the recreational fishery would operate.

Mr. Currin: All right, what is your pleasure here? I'm hearing some support for establishing an alternative under golden tile actions similar to the one we have in snowy grouper to deal with the recreational ACL and accountability measures. Roy.

## Dr. Crabtree: Yes, I guess I would move that we modify Alternative 2 to set up a recreational ACL along the lines of the way Alternative 2 is structured for snowy grouper.

Mr. Currin: Motion by Roy; second by Mark. Further discussion? Everybody okay with that? It makes sense to me. Roy.

Dr. Crabtree: Does that work, Rick; does that seem to address the comment and get us where we need to be?

Mr. DeVictor: Yes, we can set the recreational ACL according to the yield at the Foy level.
Dr. Crabtree: It's just a tough decision about then what is the preferred because I know there is going to be a desire among the recreational guys to not have them closed when the commercial quota is caught and they're going to raise Cain about that when it happens. On the other hand, if we go with trying to judge these ACLs based on the way we're planning to do it with snowy grouper there are going to be concerns when one year the recreational estimate of catch is 100,000 pounds, and then they're going to be shut down over that, and then we're just going to hear fatally flawed over and over and over, so we're in a tough spot because of the limits on the data collection programs we have and there is no easy way out of that.

Mr. DeVictor: Two questions for clarification. Snowy Grouper Alternative 2 has to compare the recreational ACL over a series of three running average years, so I just want to clarify that's in there; and also going to snowy grouper one per vessel, is that your intention with golden tilefish, too, going one per vessel?

Mr. Currin: Well, certainly, the accountability measure averaged over three years makes sense to me. I have got no problems with going to one per vessel. Is everybody okay with that, and then that would mirror the snowy alternative, then. Roy.

Dr. Crabtree: One other detail; my recollection, Rick, is we specified for snowy grouper that we were going set up the ACL in terms of numbers of fish and then we were going to use some sort of - and that's how we were going to monitor it, correct, and I think my intent is that's the same situation with golden tile, we're going to monitor an ACL in numbers. As you recall, if you look at the MRFSS data there is a lot less variability on the numbers' estimate, but when you then go in and convert it to weight, it's all over the map.

Mr. Cupka: I was just going to raise the issue about if we were to pass this motion if we would have to change our preferred.

Mr. Currin: That would certainly be an option for the committee, David. Any further discussion on this motion? Brian.

Dr. Cheuvront: This is in regards to Rick's question for guidance if we pass this and what we need to do. Rick, do we have information on trips where anglers are landing golden tilefish, the average number of fish that they're catching? I don't remember seeing that and I'm just wondering without it right now just to say one fish may be kind of arbitrary just because it matches snowy.

I would just like for us to look to see is there any real basis for doing that other than because it matches snowy. If we can get something that we can look at; I mean if the average fisherman is landing four or five fish right now do we really need to go down to one fish is my question?

Mr. Currin: Rick can check into that. He said he didn't have it right off the top of his head.
Dr. Crabtree: Well, I think the argument would be, Brian, that - I mean, we're trying to avoid hitting the ACL because we know that's going to create all kinds of problems. And because we have so much uncertainty in the catch estimate and all the rest of it, we're going to one per vessel to try and avoid hitting it. But I agree with you to take a look at that we need to do.

Dr. Cheuvront: Quickly to that point, I guess the issue for me is that if we went down to like a one fish per angler limit or something; is that in essence going to shut down the recreational fishery, which I don't think we're trying to do, is it going to be worthwhile for the fishermen to go out and pursue this?

I just don't know personally enough about the characteristics of the recreational fishery, and I would just like for us to explore the information around that before we set our hearts on a bag limit.

Mr. Robson: Just for the record, that was exactly the question I was going to ask; can we look at an analysis of whether we would need to go to one per vessel for golden tilefish. That was all I was going to ask.

Mr. Currin: Well, I'm kind of with Roy on it. I think absent anything extremely revealing in the future, it's probably the best way to go, and I would be content to have that as our preferred. Any further discussion on this motion? Any objection to the motion? I see none; that motion is approved.

All right, any desire to change our preferred, which is currently Alternative 5? It does not establish any recreational ACLs or AMs. I would interpret the desire by the committee to add that alternative and mirror the snowy to indicate that might be the way we would go. George.

Mr. Geiger: Yes, and I'm prepared to make that motion - what do we call it - the motion just made to modify Alternative 2 to set up a recreational ACL along the lines of Alternative $\mathbf{2}$ as structured for snowy grouper be our preferred alternative.

Mr. Currin: Motion by George; second by David. Further discussion on that motion? Roy.
Dr. Crabtree: Well, just relative to all this and what we were talking about, I just pulled up the tilefish landings, recreational. It was zero for 2008. I'm not sure we haven't effectively shut the fishery down with the one per person, but it went down to 2,000 fish in 2007, but there are no landings coming up at all for 2008.

Mr. Currin: I think some of those guys that were here last night would beg to differ with you on that. Keep in mind it points out the problem, Roy, that we -

Dr. Crabtree: And even with the numbers, we're talking CVs of around 50 percent.
Mr. Currin: I think everybody recognizes that's probably what we're going to see into the future until we get things moving on the right track regarding these rare species. I think I heard somebody say that the recreational estimates from a few years ago were 40,000 pounds, so now it's zero two years later. They are just going to be wildly variant.

Any further discussion on the motion to select Alternative 2 as our preferred. Any objection to that motion? I see none; that motion is approved. Do you want to take a tenminute break and be back here at ten o'clock?

Mr. Currin: We will resume.
Mr. DeVictor: Okay, moving on to snowy grouper, this is on PDF Page 205, 180 in the hard copy. Okay, snowy grouper currently has a rebuilding plan with an allocation of 95 percent commercial and 5 percent recreational. There is a commercial ACL and AM, which is set at the Foy level. There is a recreational ACL set at the yield to Foy, which is 523 fish. We already talked about Alternative 2 that would go to a daily bag limit from one snowy grouper per person to one per vessel recreationally.

The recreational AM is if that 523 fish is exceeded the RA would publish a notice to reduce the length of the following fishing year necessary to ensure landings do not exceed the 523 fish the
following year. You compare the recreational ACL over the three-year running average. That is the current preferred alternative. There are two other alternatives in there.

One, again, we're looking at the single ACL idea, and then the AM would be a closure when that single ACL is met. The concern there is the recreational catches would factor into the closure. Of course, it's difficult to monitory. Then Alternative 4, that would go to a one snowy grouper per vessel. The tighter restriction is when the commercial quota is met.

Mr. Currin: Thank you, Rick. Everybody okay with where we are on snowy grouper? Everybody okay with the preferred alternative? Gregg.

Mr. Waugh: Just a question for clarification. The public has been told that we will be counting fish that are caught north of North Carolina towards this recreational ACL and, indeed, the commercial ACL as well. We've got the measure to extend the management unit in Amendment 18. How do we legally do that?

Mr. Currin: I can't answer that question; perhaps Monica can or begin thinking about it, anyway.

Ms. Smit-Brunello: How do we legally count fish north of the management unit when obviously the management unit doesn't go up there yet?

Mr. Waugh: Correct.
Ms. Smit-Brunello: Well, I think that we're responsible for managing the area in which the council's geographic authority goes to. You can't manage beyond the area for which you have your FMU set up and your geographic authority.

Mr. Waugh: So then we would not begin counting fish north of North Carolina until we were to and if indeed we do extend our jurisdiction?

Ms. Smit-Brunello: What do you mean in counting? Do you mean in counting like in a stock assessment or what, or are you talking a specific like recreational allotment of fish?

Mr. Waugh: Yes, I'm talking about how we track our ACLs, so what fish do we count towards our recreational ACL and our commercial ACL?

Ms. Smit-Brunello: Well, unless I can think of something else, I think that the logical answer and the legal answer is that you have to count it within the management unit.

Dr. Crabtree: Well, that's not a straightforward issue. We are going to have a dolphin ACL, and to the best of my knowledge when we did what dolphin assessment we had it included the Gulf and the Caribbean in it; yet I'm assuming that when we set up an ACL for dolphin, it's going to be for the Atlantic coast and not include Gulf fish or Caribbean fish.

I guess the question is can we set up an ACL for snowy grouper that doesn't count those Virginia fish because they aren't part and aren't in our management unit? Monica's answer seemed to be that she thought that is right, and I think that's something that we ought to look at and talk up the Hill and try to get some answers to it.

We'll do that because I can't imagine that we would come in with dolphin and say we're going to count all those Gulf fish or Caribbean fish against our ACL, so it seems to me we're going to have to find some way to partition down these ACLs to reflect what we have. The fact is at this point I don't think we have any records of landings in Virginia because they don't show up in MRFSS, and I'm not sure we had any commercial landings show up in anything. I think that's a tricky question that we'll have to figure out.

Mr. Waugh: And for dolphin-wahoo the fishery management unit is the entire Atlantic coast, so whatever ACL we would set would apply for the entire management unit, and we would count fish in that management unit. For snapper grouper the management unit is our council boundary, and for some species it’s the Cape Hatteras Line for golden tilefish, black sea bass and scup.

I just don't see legally how we can count fish towards an ACL beyond our management unit. The action for the management unit is in 18 so we can't - if it stays in 18 we can only in 17 count fish towards all of our ACLs from landings and mortality within our fishery management unit.

Mr. Mahood: What I was going to say, Roy, is that dolphin is a lot different situation because snowy grouper we're looking at, what, 523 fish being able to be removed from the fishery. According to Rick Robins, who we have been discussing this with, who is the chairman of the Mid-Atlantic Council, they're taking a lot of fish in Virginia.

The question is based on the science you can only remove that many fish from the stock, and I would assume that it is the same stock of fish up there, they may even be our big spawners and are keeping our fishery somewhat alive, so how do you rectify not counting those fish from the ACL when you may be very detrimental to your efforts to rebuild the fishery?

Dr. Crabtree: Well, it's not a straightforward thing - and I’ve talked to Rick, too, but the fact is while they are catching fish up there, they're not showing up in any of our landing records. I suspect you could go to a lot of docks and find that the number of fish being caught is very different from the MRFSS estimate because we've talked many times with snowy grouper in these infrequent events you're not capturing a whole lot in those.

I hear what you're saying, but I tend to agree at least at this point with Gregg about the legalities. You know, when you look at dolphin I think it's one stock that includes the Caribbean and the Gulf, but surely we're not going to try and count those against our ACL, but I could easily argue that the removals in the Gulf of Mexico are impacting the stock in the Atlantic, too.

Now, I think this is a tricky issue, but I think at this point I agree with Gregg, but I want to kick this up the Hill and talk to some other folks about it because I doubt anyone has really explored
this all that carefully. I think it's one of those things where you could make arguments all sorts of different ways on it.

Mr. Travelstead: There is no doubt the fishery off Virginia is probably landing almost the entire ACL, although, as Roy said, these numbers don't show up in the National Marine Fisheries Service system, but just to let the group know the Virginia Marine Resources Commission did pass regulations just last month that will go into effect on July $1^{\text {st }}$ that will mandate that every recreational vessel now report all of its landings of these species. We should in the near future get a pretty good handle on what those numbers actually are.

Mr. Currin: Thank you, Jack; I hope you guys will retain some hard parts for aging from those fish as well. George.

Mr. Geiger: Mr. Chairman, again, part of this alternative for snowy grouper and golden tilefish that is really troubling is the accountability measures. With these rare-event species, the spiking that we've seen in MRFSS where it is the potential to have just an astronomical show of fish in terms of MRFSS landings and then the paybacks associated with that is just really untenable.

When you're trying to manage a 523 fish total annual catch limit for snowy grouper, it just seems to me - and we've talked about it before - how are we going to manage it; how are we going to if we're serious about it; you know, perhaps it's time to really begin to engage in some discussions about a lottery system or a lottery system for a tag so that we can really accurately keep track of what the landings are and manage this stock to the best of our ability instead of just throwing a handful of darts at the wall and calling the wall a dartboard.

Mr. Currin: Yes, thank you, George. Roy and I were talking about this a little bit at the break, and, of course, Rita brought it up first several years ago and we've kind of bounced it around the table for a number of years. It hasn't stuck yet, but I think you're right that at some point - not in Amendment 17, but some point in the near future we're going to have to get serious about a tag system. Roy.

Dr. Crabtree: Yes, I agree completely with George. In fact, I can think of no other way out on this. It would be sort of a catch-share program and you would have a lottery and you would issue - the people who got chosen would get some number of tags, and they would have a reporting requirement, and they would go fish and catch those fish.

I don't think there is just any way around it. I don't think this situation is going to be changed by MRIP. I think we've got to find a management scheme that is consistent with the data we have. Just setting an ACL and an AM right now we know is going to create problems, and so I think we ought to regard it as a very temporary situation.

I think we need to get staff to start thinking about when can we get to an amendment for some of these species with low ACLs that we get going on a tag system. The time is now to start talking about this to recreational fishermen because I suspect, as is always the case, this is a radical change on how we manage these fisheries, and there will be a lot suspicion and distrust. I don't
know how receptive they'll be with it, but unfortunately the alternative I think will be even less popular with them. I think it's something that we're going to have to do.

Ms. Merritt: Actually it goes back to Jack's comment; Jack, when you say that effective July $1^{\text {st }}$ that recreational landings need to be reported; do you have any other additional accountability involved with that such as being tied to registration, a permit, license, or anything?
Mr. Travelstead: Yes, I should have mentioned that. There is a new permit requirement for any vessel landing any grouper or tilefish species in Virginia.

Mr. Geiger: Mac, in the interest of saving time and not revisiting this topic later in the committee and discussing it ad nauseam, could we issue guidance to staff at this time under the tasking to look at the potential for development of a future amendment?

Mr. Currin: Yes, I saw Rick writing it down, so I know it has been captured. Yes, we will make sure that is included in the timing and tasks but with no specific timeline associated with it; just to capture it and keep it active. All right, if we can, let's get back to - we've kind of beat around the bush about a management unit here some, as well, and what I'm hearing is that certainly in 17 this management unit would be not established; is that the general consensus of the committee at this point?

I know we're a little out of order and we're discussing snowy grouper, but since we've had that discussion, rather than have it again later on in the day, if we can deal with that. Is that what I'm gathering from the committee, that there is no desire, as has been suggested, to bring the management unit extension back into 17 so that it tracks these other measures for snowy grouper and blueline tilefish? I'm seeing no hands, no nodding of heads, no nothing. No, okay. All right, that will help Jack.

All right, let's get back to snowy grouper, then, Page 205. The alternatives are there; there are four. We currently have a Preferred Alternative 2, which kind of mirrors the one we just established for golden tilefish. Is everybody okay with that? Any desire to change it? I see none. All right, Rick.

Mr. DeVictor: Okay, moving on to red snapper. This is PDF Page 214. With red snapper there are four basic actions that we'll go through. The first one is the management reference points, so that is msy and oy. Then there is a rebuilding schedule action setting that and then the rebuilding strategy. Then we move on to management measures - I'm sorry, there are five of them and the fifth one is the monitoring plan.

We will start off with the msy and oy alternatives. This is how we normally do it; we've done it for past amendments. What is currently in place is msy equals the yield produced by Fmsy. F 30 percent SPR is used as the Fmsy proxy. Then keeping up with msy, Alternative 2 says msy equals the yield produced by F 40 percent SPR, and they're defined by the rebuilding projections.

There is a recommendation by staff that we track language that was used in Amendment 16 for gag and vermilion snapper and I think 15. What that language said, it wouldn't specifically state

F 40 percent SPR; it would state by Fmsy or its proxy. We feel that if you put F 40 percent in here you may get locked into that and it may take an additional amendment to change it, but if you keep it broad and saying Fmsy or its proxy you could change the value of msy without an amendment.

Now, certainly, the document will talk about comparing F 30 percent and F 40 percent. That is one clarification that we need if we change that language from msy equal to yield produced by F 40 percent to "by Fmsy or Fmsy and its proxy".

Mr. Currin: Any comments or reaction? It makes sense to me. Roy.
Dr. Crabtree: Yes, I have quite a few comments on this section. First, we've got the table, Rick, and it says Alternative 1, but the values it lists for Fmsy and Foy there are I believe out of an assessment or maybe they were out of the SFA Amendment, but at any rate those values are outdated and I think need to be replaced with the values that we have now out of the last projections.

When we requested those from the Science Center last week, we specifically requested numbers that correspond to F 30 percent so that we would have those. I think they need to be reflected in the table. Then we get into the comparison of the alternatives. For example, it says Alternative 1, status quo; Fmsy is estimated to be equal to the F 30 percent proxy; however, msy is not specified.

Well, we have an estimate of what msy is or what the yield at F 30 percent is and I think that needs to be reflected in that discussion. Then there are a number of statements made in the document that I don't believe are quite accurate. For one it says Alternative 2 offers the best estimate of the true Fmsy and the only estimate of msy.

Well, it is really not an estimate of msy; it's a proxy, number one. We do actually have an estimate of Fmsy from the assessment run because they did estimate it when it was done. Here is the difficulty that I think we have. If you look at the runs done at F 30 percent they actually produce higher yields than does F 40 percent; so if you were just to look at it on the face of it, the runs we're operating off of tend to suggest that actually F 30 percent is a better proxy for Fmsy than F 40 percent is because those runs produce higher yields.

That's something we're going to have deal with. We have, in my view, some not totally consistent recommendations and things on this. Then when you look at some of the statements, there is one, Rick, where is says Alternative 2A is the most precautionary alternative because it provides the largest buffer between msy and oy.

Well, that's not clear to me because under status quo right now we have msy at an F 30 percent and oy is at an F 45 percent. Now you go to Alternative 2 we're talking about msy at F 40 percent and oy at some percentage of that, but it is not straightforward to me or clear to me that the buffer between - for example, msy, Fmsy and 75 percent of Fmsy, I don't know that that is a larger buffer than the buffer between 30 percent and 45 percent SPR. I think we have to ask the Center to comment on that.

Then in the comparison of these analyses there is a statement that says that the long-term yields in status quo, meaning F 30 percent, are not likely to be sustainable. Well, I don't think that's consistent with the science we have. Clearly, the projections we have for F 30 percent indicate it is sustainable. In fact, they indicate it's a closer approximation of Fmsy.

I don't think sustainable or not sustainable has anything to do with the analysis. I think you can argue that the fishery may be sustainable somewhere close to where it is right now. It's been there for many years and this actually seems to be improving. I don't think that this is an issue of sustainable or not sustainable.

Then there is another comment about economic analyses, and I think what we're facing here is that the economic analyses of F 40 percent are all going to be negative for F 40 percent as opposed to F 30 percent because F 30 percent produces higher yields than F 40 percent, so there are going to be economic losses if you go with F 40 percent, and they're going to be in the projections all the way out to recovery because F 40 percent doesn't maximize the yield. F 30 percent comes closer to doing that.

I think that is just inevitable in how this is going to come out. Where that leaves us, then, is the council is going to have to make a choice of do you want to stay at F 30 percent or do you want to go to F 40 percent? The SSC has recommended F 40 percent to you, and I think you need to give very, very careful consideration of their advice.

But in the end what I think you've got to look at in the document has to do with the risk assessment; what are the risks associated with staying at F 30 percent versus the risks of going to F 40 percent. There is a lot of uncertainty in all of this; and that was the essence of what came out of SEDAR, uncertainty about the stock-recruitment curve, and that sort of led to a recommendation of F 40 percent.

Then let's think a moment about, well, what are the risks that we're talking about? I don't think it's a matter of sustainability of anything like that. John, correct me if I'm wrong, but as this stock grows I suspect we will get better estimates of the stock-recruitment curve down the road and we will re-estimate all this; and by the time the stock is recovered we won't be using F 30 percent or F 40 percent. We will probably use an estimate.

The real issue is what if we choose F 40 percent, but we find out five or ten years from now it's really closer to F 30 percent; what are the consequences? And vice versa; what if we choose F 30 percent and find out later it's $F$ percent? So, if the council decides to stay with $F 30$ percent and then we find out later down the road it's actually a value closer to F 40 percent; well, what happens there?

Well, that means we're going to get ten years into the rebuilding plan and we're going to find out our fishing mortality rates are still too high because really Fmsy is closer to F 40 percent and we're going to have to make some additional cuts down the road. That's obviously not going to be popular because people are going to be seeing way more fish out there, and here we're going to come in and say, well, we have re-estimated these things and we've got to make cuts again.

It seems to me that's really the risk of changing F 30 versus F 40 is you may do not enough early on and you may have to make additional cuts down the road. Likewise, if you choose F 40 percent and then you find out down the road it's actually closer to F 30 percent, which is what to me the current assessment tends to indicate, what are the consequences of that?

Well, that means you're going to get some period of time down the road and you're going to find out you actually cut more than you had to. That's good in a sense; you'll be ahead of the game in terms of recovery and you're going to be able to relax the fishing mortality rates. But the downside of that is you may have put some vessels out of existence and you may have put some people out of business because you cut more deeply than you potentially could have. That is my way of thinking about the risks of this, and I think that's really how this analysis probably ought to be structured. I don't know if Bonnie or John has any other take on that, but I really think that's how this needs to be structured, and I kind of think that's how you need to think about this.

Mr. Waugh: I had just two points back at the start of that discussion. The table is reflected up here under Alternative 2, and the suggestion is to fill in the values that are shown as not specified. We've had this discussion and debate in 15A, 15B and 16. What we're describing is what was done in the past. That's the no action; what is the status quo?

The status quo was we set msy equal to the yield produced by Fmsy. F 30 percent was used as the proxy. That value in terms of a fishing mortality rate was 0.4 . At that point in time we could not equate that to landings and that's why it's shown as not specified. To us, as we have done in 15A, 15B and 16, we think it's a more accurate representation of the current status quo to leave it the way it is.

In terms of Alternative 2 where we're talking about the msy, I'm not quite sure how we got to this point where in essence what we're doing now is having the council vote on which msy we're to set msy. What we did in Snapper Grouper Amendment 15B and 16 was specify msy equal to the yield produced by Fmsy; msy and Fmsy are defined by the most recent SEDAR process.

We have set the procedure for letting the scientific assessment and peer review process generate Fmsy and msy, and so what we're doing here now is putting - and we analyzed whatever that value is relative to the status quo. The product coming out of the scientific peer review process is to use F 40 percent SPR as the proxy.

Our suggestion is to reword the msy specification to track what we've done in 15B and 16 and leave it up to the scientific peer review process to provide us whatever the best scientifically justified value is for Fmsy and msy.

Mr. Robson: Well, I guess my question then is if you've used the language we've used in previous amendments, based on the way that's worded and the SSC has recommended F 40 percent SPR for msy, then there is no difference. I mean, it's still specifying 40 percent. It doesn't give the council any flexibility to do what Roy has suggested in terms of looking at those and doing a risk analysis.

Mr. Waugh: Right, and that's by intent because what we're doing is taking the scientific decision for Fmsy and msy and letting the scientists determine that rather than the council voting on what those values should be.

Mr. Robson: But this was a question I was going to ask and this might be the right time, and I don't want to put Monica on the spot, but in terms of what the Magnuson-Stevens Act requires in terms of setting - I know there is specific language about an SSC recommendation for these values.

I don't know if it's talking about msy or if it's talking about ABC or overfishing limits, but it makes a recommendation later on - and I can't remember where it was, but it says the council "shall" take that recommendation. I'm wondering what flexibility we have because I want to have this discussion about whether we should be looking at a goal of 30 percent or 40 percent.

Ms. Smit-Brunello: I think what you're think about is that the SSC specifically shall provide the council-

Dr. Crabtree: The fishing level recommendation.
Ms. Smit-Brunello: Right, the council develops the ACLs but cannot exceed the fishing level recommendations of the SSC.

Dr. Crabtree: I want you to know this is an issue I've had extensive discussions with the Science Center and with folks in headquarters, all the way up. I don't have a problem with Gregg's idea if you just want to accept whatever comes out and you want to add that as an alternative in here, okay. But in the end you have to vote on this and you are going to make the choice about what you want to do here.

Now, I think in this case the science does not give us the answer. I want to be clear that we're not voting on msy here. MSY is just a biological number that is estimated, but the problem is in this case we don't have an msy that's estimate with sufficient credibility to give us an answer, so we're voting on proxies and not on msy. F 30 percent and F 40 percent are proxies.

Inherent in choosing proxies is some evaluation of what are the risks involved, and judging risks is your job and not the scientists' job. My argument has been and guidance to you is going to be that in choosing in these proxies it is not strictly a science decision nor is it strictly a management decision. It involves elements of both.

The other thing I would point out to you is your SSC was not in agreement on this issue, and there were arguments made on both sides of it. I think the only fair way to characterize this is there are a range of values that could appropriate proxies for msy. It's hard for me to say 30 percent is not in that range because we recently went with 30 percent for mutton snapper, which has a lot of similarities. We have used 26 percent for red snapper in the Gulf of Mexico.

It seems to me the record we have as an agency and as a council indicates that 30 percent is in that range. Now it may be in terms of fishing mortality rates on the high end or in terms of SPR
on the low end, and that's fair enough. I think there are elements of risk involved with this and that you're going to have to make that judgment call and that decision.

Now, I disagree with you, Gregg, on one thing, that I think when F 30 percent was adopted back in the SFA Amendment we were clearly adopting F 30 percent and not locking ourselves into a specific F number. I think the more appropriate way to look at this in this table is to put the new values of msy and F 30 percent and the yields at F 30 percent into it. That's the only analysis that's meaningful.

It would be meaningless right now to analyze F 40 percent versus old fishing mortality rate numbers that we know have no meaning anymore and aren't based on the best available science. I can't really make an argument that when the council adopted and agency went along with F 30 percent that we were locking ourselves into specific numbers.

I think the point is when you accept one of these proxies it is the proxy you're adopting, so I think the table needs to be changed and I think the values that we now have of that new assessment need to added into it. I mean, you've got a recommendation that the majority of your SSC gave you on F 40 percent, but I can't come to a position where I can see how you can make those choices without engaging in some consideration of what are the risks of the choices. And because the proxy is established in the fishery management plan, you have to vote on it.

Now, to get to Mark's question about the fishing level recommendation, well, that's true, you can't exceed the fishing level recommendation that comes out of the SSC or the peer review, but the SSC has to give you a fishing level recommendation and an OFL recommendation that is based on the criteria that are set up in the FMP.

If the council says that F 30 percent is the proxy we're going to use and that's approved by the Secretary, then the scientific advice is going to have to acknowledge that's the overfishing level and have to base it on that. Now they can decide because of uncertainties and all these types of things we're going to reduce for uncertainty, but, again, that's going to have to be based on control rules and decisions you make about risk. It's a complicate decision, but I can't accept the argument that there is no choice to be made here. I think there is a choice that you have to make here.

Ms. Smit-Brunello: And it might be helpful if I read one of the responses to the comments to the National Standard Guidelines Final Rule - well, the proposed rule that went out and then the final rule went out on the $16^{\text {th }}$ of January, and Comment 42 sort of raised some of these issues, and the Fisheries Service responded as follows:
"NMFS believes that determining the level of scientific uncertainty is not a matter of policy and is a technical matter best determined by the stock assessment scientists as reviewed by peer review processes and the SSC. However, determining the acceptable level of risk of overfishing that results from scientific uncertainty is the policy issue for the council to decide."

Dr. Crabtree: And read the next sentence because I think that is relevant.

Ms. Smit-Brunello: "The SSC must recommend an ABC to the council after the council advises the SSC what would be the acceptable probability that a catch equal to the ABC would result in overfishing."

Dr. Crabtree: So, in essence, when the SSC provides an OFL and things like that, it has to be consistent with what is specified in the fishery management plan. They can then advise you of given all the uncertainties these are the risks inherent in it, but it has got to be consistent with the plan.

Mr. Currin: Other thoughts or comments? It's a lot to think about. I have to comments to make, I guess, Roy, based on what you outlined and stated. One is I sat in the SSC meeting two meetings ago, whenever it was, when they were discussing which proxy to use.

There was some back and forth on that, but it was primarily between one individual arguing that 30 percent would be appropriate and the people who waded in on the conversation on the SSC were advocating 40 percent as a minimum with some comments that recent literature is suggesting that may be low and that it should be higher. I think the guidance to me from the SSC was pretty clear as far as their advice to us regarding the use of 30 or 40 percent.

Now, your comments about the risk analysis are very good and well made. One of the comments you made was that we must consider whether going at a level of 30 percent somewhere down the road if in fact that was an inappropriate or risky approach to take would require additional cuts, perhaps, and that's certainly real.

To me that risk is less acceptable than going with 40 percent and realizing that we perhaps did too much at this level or at this point and then being able to back off even more quickly than we would have, perhaps. You know, you're right and I guess everybody has got their own opinion on what would make them feel better about it, but I just wanted to let you know how I feel about it.

Dr. Crabtree: And I want to be very clear; I'm not advocating any particular SPR value. In fact, if you asked me I'm going to generally advise you that you ought to listen to your SSC. What I'm telling you is this needs to be a conscious decision that you're going to make and you choose on this one. Part of the reason for this is one of the problems that I have to deal with, we've got different outcomes to different assessments.

We've got different choices and different things used in different regions. I've got to be able to explain to folks, well, why is the proxy we're using in the Gulf different from the one in the South Atlantic. I don't have any problem with explaining to them, well, in the South Atlantic the council chose this one. They evaluated the risks and they made a determination about how much risk they were comfortable with; the Gulf made a similar decision.

And I can tell you that in the Gulf the council voted on those things and has, and they reached a different conclusion in terms of the risk. Part of the purpose for regional management is to allow councils to come to different decisions about those. I'm very comfortable with that, but I need to be able to explain it. That's really why I think this is an important issue.

The other thing I would point out to you, you know, if we were looking at an F ratio that was only a little bit higher than 1, this will be a big decision, but we're looking at an F ratio that is many, many times higher than 1 . From what I can tell, the difference between what you need to do with F 40 percent and F 30 percent is a matter of probably less than 10 percent in terms of how much reduction you require.

So this isn't really a huge decision right now because the Fs you have are so high, but I want to be clear that I'm not advocating to you that you should choose F 30 or F 40 . All I'm saying this is a decision you've going to have to make and we need to have a very careful, thoughtful and accurate analysis in the document to document what that decision is, because we're likely going to face litigation on this, and we all know that.

This is something that someone could come in there. They could come in and say, "You know, you went with F 40 percent and we don't think you have any record to explain why that is, and your own assessment runs indicate F 30 percent has higher yields. What I'm trying to do is make sure that this document acknowledges all of that and carefully explains why these choices are being made so if we end up in front of a judge it shows that we carefully considered that and made a choice. I don't think any judge is going to second guess you in terms of these types of decisions.

The important part is that the analysis is very careful, very factual and you made a conscious decision based on your best judgment. That's all I'm trying to get here. You guys make the call on where you want to go on this.

Mr. Swatzel: Well, I just appreciate Roy engaging in this conversation to know that indeed the council has discretion here and that we're not in potted plants concerning making this risk decision. I would just I guess argue in favor of the F 30 percent proxy. I know it may not make a whole lot of difference in terms of the needed reductions, but it would make some.

Obviously this is an issue that is going to economically affect a lot of people. We heard that over the last couple of nights. Anything that we can do that might have some reduction on the closed areas would certainly be I think helpful. The other issue is I think I recall that they used F 30 percent in the Gulf in that particular stock assessment, so this would certainly be consistent with that.

And the other issue is sustainability. I agree with Roy, I think he certainly points out that I don't think sustainability is an issue here. Certainly, this fishery has been overfished for a long, long time, and it still is sustainable. I'm just arguing in favor of the $F 30$ percent proxy. I do appreciate this conversation we're being engaged in.

Mr. Geiger: I also really appreciate Dr. Crabtree weighing in on this and bring to light a number of issues that we need to certainly consider. I agree with Tom that I too am sensitive to the economic concerns that we've heard expressed by the public in public testimony two nights ago and last night as well.

You know, it just strikes me, however, that personally I believe some of the reason that we're here today arguing a lot of these snapper grouper issues is that we've taken measures in the past that were not as risk averse as they possibly should have been, which resulted in stocks not actually recovering to the point that management measures that were put in place intended them to.

I agree with you, Mac, that to me I think it would be far worse to go down the road ten years and find out that we haven't done enough and we've got to take additional measures and further exacerbate an economic problem that may or may not have been created by the actions that were taken here.

Quite frankly, a lot of the things I've heard when people were talking about it, we haven't even taken any action on red snapper yet and people are already talking about using figures like 70 percent of their businesses down. I mean, this is an economic problem, but is the end game red snapper; I don't know. I would speak in support of a more risk averse position of using 40 percent as our metric in lieu of 30 .

Mr. Currin: And I don't Roy's bringing this point up is to get us to decide whether in fact that's what we want to do; certainly, not today. The implications of the additional analysis for this first point regarding red snapper are that we are going to have to ask staff to go back and provide that if that's the desire of the committee. I'm sure that are going to be others as we start looking at different issues of red snapper where that is going to occur. That has implications currently. Red snapper is in Amendment 17.

Maybe this one analysis, if that's all we're going to ask for, might lend itself to having red snapper remain in Amendment 17, but in outside conversations I'm not getting that sense from a number of people. At some point we're going to have to have that discussion and it doesn't have to occur now either, but I want to make it clear to everybody that no one is asking anybody to make a decision or to have a vote today on whether we want to select F 40 percent SPR or F 30 percent SPR. Mark.

Mr. Robson: Thank you, Mac, and, yes, that's I guess something I wanted to clear up because we are talking about what is in the table in terms of alternatives. There has been some discussion of modifying the language so that it allows for - that it doesn't specify your Fmsy value. I guess I'm still confused as to how we're going to present that in this table.

I agree with all the things that are being said. I do feel that depending on the analysis that staff can do, that even though if we were to go down a path of a 40 percent SPR, yes, it's true you can back off if it allows you to do that and it is more conservative, but I do think that we need to take into account wherever we can the possibility of mitigating some of the actions that we would have to take.

If we were to go back to a 30 percent it might help a little bit because you do have the economic impact that people are facing or will be facing within the next year to two years or three years in terms of businesses going away, and that can't be brought back once that happens.

Mr. Geiger: I guess now I'm confused because I thought the purpose of this exercise was in fact to select preferred alternatives, especially in light of the conversation or the comments that Gregg made in terms of the need for selecting preferreds for red snapper at this council meeting to get the document ready for public hearing possibly in September.

If we don't select preferreds and allow the analysis to be done because the decisions we don't make - I think we need to make the decision here to move on to the next oy decision, which leads us into the rebuilding decisions which leads us into the management decisions which are all inextricably linked. Correct me if I'm wrong, I just thought we were supposed to be selecting preferreds here.

Mr. Currin: If you had asked me that question at the last meeting, I would have told you yes. If you had asked me at the beginning of this meeting, my answer may have been yes, maybe. At this point my answer is I was real unsure.

Mr. Geiger: Well, then, we need to discuss what has changed, figure out where we're going and what the timing is on where we're going because -

Mr. Currin: I agree, George.
Mr. Geiger: -- we heard yesterday that there is no intent to delay. We talked about getting this document - you know, one of the actions was to send this Amendment 17 out for public hearing as a result of this meeting, and we've been working on it since December. We heard comments yesterday which indicated that we could have it ready for September if we select preferreds in red snapper at this meeting.

So if we put off selecting preferreds at this meeting and put it off until September and we do it in December, which means if the interim rule goes in place we're going to have a lag between the interim rule and when we eventually get Amendment 17 out.

Mr. Currin: Well, I think what I'm hearing Roy suggest is going to require that the staff go back and do some further analysis and develop another alternative for consideration for the council to select an msy, if I interpreted that correctly. If it is the desire of the committee and you're content with the advice from the SSC now that 40 percent SPR is the way you would like to go, then that's what we can do; I mean, we can select that as a preferred

But the issue Roy brought up about whether the values in the table are not - to me, it's not a big deal. We've done it before as it is presented here and whether that value is there or not to me is not a huge big deal. I'm fine with it either way, but the issue of selecting the alternative for the SPR level is a big one. What is the committee's desire? Brian.

Dr. Cheuvront: I'm completely sympathetic with the bind that this would put us in as far as timing goes, but I also heard some things that Roy said. I know that the council is going to be regardless of whether we consider F 30 percent SPR or F 40 percent SPR as our proxy for msy, we're going to be facing a lawsuit most likely.

If we get to a point where we've got things that we didn't consider and a judge orders us to go back and consider such things, things that we can't defend in court, that could be opening up a whole other can of worms that could create another bureaucratic nightmare. The issue here is that I think Roy has presented us with an option that we didn't know that we had before.

I'm sorry that it has happened at this time. I wish we had had this discussion back in December. We haven't done anything yet to this fishery. We are hearing all the problems with the closures and all. Some of this has already happened without us doing anything. People are going out and fishing less. I'd just as soon we do it right and do it up front, if I had to choose, but I'm really sorry about the delay that this is going to cause. This is going to have a huge ripple effect.

Ms. Merritt: I think Brian said a lot of what I had been thinking of, but it kind of goes back to what Roy said about having some choice. I do take the SSC's advice very seriously, but they do not have in place that socio-economic subpanel or committee or whatever it is we're calling it yet.

You know, we get additional information to consider, so when they make a recommendation I want to hear why they made it; and then if we're allowed any choice, to be able to use all of the other information that we've had available to us in order to make that final decision. I believe that we need to do it right, like Brian said, do it right now before we move forward.

Dr. Crabtree: Well, I don't know that socio-economic concerns really have a lot of place in what we're talking about right now. I don't think we're talking delay here at all or slowing down. These alternatives will all have to be analyzed either way. You've had a lot of discussion and if you feel like the discussion we've had about the risks and the other aspects of this are sufficient to allow you to make a reasoned, preliminary decision here, then I think you should go ahead and make it.

Keep in mind, too, this a preliminary decision and it's going to come back with a lot of things written up that you're going to look at in September and whether you make a choice today or not, that is going to be done and you can come back in September and you may change that choice. You may come in at the December meeting and change something.

So you're not locking yourselves into anything, and I don't think we're really talking about delay here. I think you ought to think about - I mean, obviously, we'd like to get some preferred alternatives in, but you need to decide whether this discussion gives you enough to do it. I want to come back a little bit to what Tom was talking about and all that and Mac about the risk inherent in this.

You need to be very careful here because if you find yourself in a situation where we do an update next year and then maybe we do a benchmark three years later; and if we've really made good progress and you get there; and as most of your scientists are advising you it turns out something closer to 40 percent really is more likely and this is where it turns out to be; well, the difference between the F 40 and F 30, F 30 is an F of about 0.15 and F 40 is an F of about 0.1.

When you get there that's going to be a big cut and you're talking reducing fishing mortality by 35 or 40 percent at that point. I'll tell you what, it will hurt like hell. I think the Gulf may be facing that the next benchmark they do. That's a big risk you're taking for something that's going to be very unpleasant.

I also don’t believe with where you are now this has huge ripple effects. You're talking a few percent difference in terms of what you're going to have to do and we've looked at it. Because the Fs are so now, it's not that big a difference in what you have to do and the ripple affects not that much.

So if you go with your science advice and go with F 40 percent, I don't think it’s going to be much different to the public in terms of what happens; but if you go with F 30 percent and you're wrong and you get down the road, that's going to be an awful difficult position to be in. And if you think you're hearing from the public now that there are lots of fish out there and this is the best we've ever seen, you give this thing five or six years and see how many more fish are out there and then come in and say we've got to cut 40 percent. It's just going to be unbelievably painful. You need to think awful careful about that one.

Mr. Currin: And that's probably a scary scenario to me, Roy. George.
Mr. Geiger: Thank you, Roy, for those comments. To Brian's comment about reduction in effort, it's not. Red snapper right now is four times higher than it was last year in terms of landings - correct me if I'm wrong, Jack.

## Dr. McGovern: You're right.

Mr. Geiger: Four times higher, and we’ve heard testimony that we think we've got a huge recruitment class out there in 2007; and the longer we dither, the longer they continue to get hammered, and that's going to be the basis for our entire recovery plan. If delay occurs, they just continue to - I mean, they're four times higher, Brian, four times, and that's going to continue because we're now moving into the summer season where you're going to have the largest red snapper landings in July and August. God knows what is going to happen to that year class even this year.

Again, when we select these preferreds, they're preliminary preferreds. Amendment 13C, at the last minute we went in and we changed preferred alternatives in 13C. We did it in 15B. I'm not sure we did it in 16; I can't remember. You know, we have the opportunity and this council has always been - and, you know, that's one of the things that rankles me. We're having this discussion today based on public testimony, and all those changes to preferreds in the past have all been based on public testimony, that when we took the document out to public hearing caused us to make a change to those preferred alternatives.

Dr. Cheuvront: My comments weren't against choosing a preferred. It was making sure we got the analysis done, and that's what my comment is. I still think that we may end up with a 40 percent SPR as our proxy for msy, and I could probably still go with that. I just think that we need to make sure that analysis gets done and gets in the document.

I agree with you; I'm not so sure I would be so upset if we chose tentatively the 40 percent SPR as our preferred now. That would probably be okay. I just want to make sure we have that other option that we can consider and change it later if we need to.

Mr. Currin: Well, currently where we are is the no action alternative is the 30 percent. Now, Roy is asking that we actually put some values in there. I guess that would allow us to compare those values a little more. Again, I'm fine if that's the way we want to go. Gregg has made some comments about that.

Dr. Crabtree: And that analysis will be done, Brian; it has to be done. How we exactly format it is one thing, but it's going to be done, and it's going to be done whether you choose a preferred today or you don't choose a preferred today. It's going to be an objective, well-considered analysis because it has to be.

Ms. Smit-Brunello: What I was going to suggest has already been said in that you've got flexibility even if you choose a preferred. You call it a preferred today; it's really kind of a preliminary preferred because you're going to take it out for public hearing and get public comment, and the council can change its mind.

Mr. Currin: I've got Mark and then if someone wants to move that we select a preferred for this action, that will get us off the block and moving off this page that we've been stuck on for the last 30 minutes.

Mr. Robson: My questions have been answered in terms of what sort of analysis would be done. I think I understand what the staff will be looking at, including the explanation - and it's probably already in the document, but the explanation of the SSC recommendation of the 40 percent as a value.

Mr. Currin: All right, is everybody clear of where we are? I can get Rick to kind of recap and summarize if you'd like. George.

## Mr. Geiger: I would like to make a motion that Alternative $\mathbf{2}$ be our preferred alternative.

Mr. Currin: Motion by George that the committee select Alternative 2 as the preferred; second by David Cupka and Robert. Further discussion on this motion? Brian.

Dr. Cheuvront: I just want to get a clarification, then, and it won't be that difficult to do. Obviously, if we're doing the F 30 percent SPR under Alternative 1, no action, that we'll have something similar to Alternative 2A, 2B and 2C, but they will be 1A, 1B and 1C with the 65 percent of Fmsy up to, what, 85 percent Fmsy.

Mr. DeVictor: Yes, we currently have those values on the next page. We have the oy's associated with F 40 percent proxy and F 30 percent proxy.

Mr. Cupka: Mr. Chairman, I was just going to say I know we're not going to make a final decision today, but I keep thinking back - and I'm very sensitive to the economic impact issues;
there is no doubt about that, but I also keep thinking that we need to be risk adverse, too, because we never quite seem to get the results that we anticipated on some of these management actions.

I think part of the reason why is because, as Jim Waters and others have said, in these models they can't account for changes in fishing practices. I think that's part of the reason why we never seem to achieve reaching some of these savings or having impacts on management measures that we would like to have.

I think we need to keep that in mind, too, and I guess that's one reason why I'm willing to second this. I do want to look at the analysis in both of them and whatnot, but I just keep thinking how we're in this situation we're in today because we never quite seem to reach the point that we think we're going to reach with these actions. I think we need to be as risk adverse as we can given the history of these things.

Mr. Geiger: Yes, and when David is sitting on this council in the year 2018, I want to make sure that he doesn't have to deal with this mess.

Mr. Robson: Well, for clarity I would suggest that we include the equivalent of Alternatives A, B , and C in the Alternative 1 so that those are clearly identified as potential alternatives for consideration for the different oy levels. I don't know why they wouldn't be included. There is the table that just describes the yields but it doesn't say those are alternatives, does it?

Mr. Waugh: Mac, this is the problem when you start changing what the no action alternative is. If you want an msy of using the 30 percent proxy and then look at various oy's, you've got to create another alternative. The no action merely describes what is in place now. We have a footnote at the bottom that tells you what the yield is, but you can't add subalternatives to what you did seven or eight years ago.

Mr. Currin: Yes, that's a good point. Roy.
Dr. Crabtree: Rick, why couldn't this be restructured a little bit so that instead of having Subalternatives 2A, 2B and 2C, they became Alternatives 3A, 3B and 3C, and then those proportions which are specifying I guess oy could apply to either choice of 30 percent or 40 percent. That way the current oy of F 45 percent could be replaced by one of those. Is that the way to address this?

Mr. DeVictor: You could do it that way or you can actually separate this into two different actions and have msy as one action and then the next action would be setting oy. There is a linkage there as there is a linkage between the rebuilding schedule and the preferred gets carried forward to the next step. I think either way would work.

Mr. Currin: Rick, what would be the most efficient from the staff's perspective or are they pretty much the same?

Mr. DeVictor: I'm thinking about separating them into two different actions would be the simplest.

Mr. Currin: Is there some desire by the committee to request that as an approach to Mark's dilemma?

Mr. Robson: Yes, I would like to see that done.

Mr. Currin: Yes, as Brian pointed out, the motion currently states the msy and oy alternatives, so if the oy alternatives are in a separate action that's going to affect this motion. We need to change that somehow, either amend this motion, withdraw it and start over. Is there a desire to amend this motion just by removing the oy and just let the motion read the MSY Alternative 2 be our preferred, and then we will have to deal with the oy in a separate action?

Mr. Geiger: That's fine if that takes care of it.
Mr. Currin: It's okay with the motioner; is it okay with the seconder? I'm seeing nods. The motion now reads that the MSY Alternative 2 be our preferred alternative. Further discussion.

Mr. Robson: And I agree that we have the option to look at this, and I'm going to vote against selecting a preferred alternative. I'm not going to vote for this motion. I do hope that we will have the ability to look at a thorough analysis of the differences between 30 and 40 percent in terms of the impact on management actions and that we would look at that in September.

Mr. Currin: Further discussion on this motion? Is there objection to the motion? The motion is approved with four objections. Did I capture all the objections? Okay, the motion is approved with four objections. Go ahead, Rick.

Mr. DeVictor: And just to clarify the direction to staff, we had modified that language to read "msy equals the yield produced by msy, or the msy proxy, msy and Fmsy defined by the most recent SEDAR/SSC." And we put a footnote that the recent recommendation is F 40 percent SPR.

Mr. Currin: That makes sense to me. It keeps it clear and it doesn't have to be changed every time. It is kind of an incorporation by reference thing, I guess. Is everybody okay with that? All right, is there a desire to select an oy alternative? Those will now be in another action. George.
Mr. Geiger: Just to move it along, I would make a motion that we select Alternative 2B. It's been our historical proxy, that we have selected 75 percent Fmsy would be our preferred alternative. Again, I'm sure the analysis will be done for everything else. Again, it can be changed at the next meeting.

Mr. Currin: Right, thank you; and just a clarification on that, that it's currently 2B, but it will be - I don't know what it will be in the new action as we establish it so let's not lock ourselves into that, but it's the 2 B equivalent as an oy alternative. Is there a second? Second by Robert. Discussion? Any objection to that motion? I see none; that motion is approved.

Mr. DeVictor: We will continue with that table that we have that shows the oy that depends on your choice of msy, and we will have that in the discussion. Rebuilding schedule is the next
action, and that is on PDF Page 219 or 194 in your hard copy. Okay, there are four alternatives and these were reflected in Bonnie's presentation this morning.

Alternative 2 would be 15 years; that's Tmin. Alternative 3 is 25 years and Alternative 4, which is Tmax, which is the shortest time plus the generation time is 35 years. You have a choice of four alternatives. I believe if we get the rebuilding strategy alternatives, which is the next step, I believe all but one of them actually get to Bmsy within the 25 years.

Mr. Currin: What is your desire here, folks? George.

## Mr. Geiger: Well, I would make a motion that our preferred alternative be Alternative 4, which is the longest time period allowable for rebuilding.

Mr. Currin: Motion by George to select Alternative 4 as the preferred; is there a second? Second by Susan. Discussion? As George indicated, this is the longest allowable timeframe for rebuilding, lawfully allowable. I see no discussion. Any objection to that motion? I see none; the motion is approved.

Mr. DeVictor: Okay, the next action is actually the rebuilding strategy. This is the action that actually sets the ACL in Year 1, which is 2010. Alternative 1, do not define a yield-based rebuilding strategy for red snapper. Alternative 2 would set the rebuilding strategy for red snapper that maintains the fishing mortality at Fmsy.

The ACL would be 82,000 pounds whole weight. This is a constant catch so you would hold this ACL in place until you have the next assessment. That ACL in Year 1 would take you to the overfishing threshold. Then there is a series of alternatives according to the rebuilding projections that was presented to you this morning that would go from 85 percent of Fmsy, 75 percent of Fmsy and 65 percent of Fmsy.

You can see in all those what the value would be in Year 1; 69,000 pounds whole weight, 61,000 pounds whole weight or 54,000 pounds whole weight. Then once this is choice is made, as George brought up, this is linked to your management measure alternatives; whereas, the size of the closure will depend on what choice you make here.

Ms. Smit-Brunello: I should have gotten my hand up sooner earlier, so I apologize. This was on George's motion to choose Alternative 4, the longest time series for rebuilding. I know this is preliminary because we're going to go out to public hearing, but I was wondering what the rationale was for choosing the longest time period, if we could maybe have a little record discussion. And if not, okay.

Dr. Crabtree: And, really, the guidance on this is you choose the shortest - you start at the shortest realistic time it can rebuild in, and then you increase that taking into account socioeconomic concerns and things like that. In this case this is an extraordinary circumstance given the problem we have, the magnitude of them and all that.

I think you can probably make those kinds of arguments, but you do need to make them because this is something that folks will focus in on this, so we need to be very careful about laying out the rationale for choosing the longest allowable time.

Mr. Currin: Well, you're a member of the committee and you did a very nice job. To me it is fairly apparent, but thanks for that reminder, Monica. Obviously, the longest rebuilding time is going to have the minimal socio-economic impact. We have even received comments from recreational angling groups who are usually fairly staunch in their support of ending overfishing and rebuilding at the fast possible rate.

One of those groups has even recognized in their statements to us that this is an extraordinary event and action that we're taking and that they would fully support a more measured approach but still making sure that we do end the overfishing. George.

Mr. Geiger: And, certainly, this is a long-lived species. The last stock assessment indicated that we've got animals that live to be 54 years based on aging. We really don't know how long they lived in the virgin stock, but it is a long-lived species. The socio-economic impacts of having less than this maximum time series are absolutely horrendous when you look at the tables. I mean that is really bad. I just thought in light of the long-lived age of the fish and the huge socio-economic impacts on anything less than the maximum rebuilding plan just spoke strongly to using the maximum.

Mr. Robson: And I would agree with everything George said. The other point of concern is that the red snapper actions we're contemplating are not being done in isolation. We're taking actions over the next few years for a whole suite of snapper grouper species, and particularly in Florida, where I'm based, those cumulative impacts or the total impacts are significant.

I think wherever we can, and in this case if we can select a longer timeframe for rebuilding for this one species, we're looking for ways to help mitigate those impacts as a result of all of these actions that we're taking for snapper grouper as a complex.

Mr. Currin: Yes, everybody has heard the comments from the public and many of them realize that we're under the constraints of Magnuson and must act within certain timeframes, and this is one place that we can legally choose to minimize the socio-economic impacts, and it certainly makes sense to me. George.

Mr. Geiger: No, I was getting excited about moving on if that satisfies Monica's requirement.
Ms. Smit-Brunello: Well, it's not Monica’s requirement, but I think we have some good record discussion.

Mr. Geiger: Satisfies Monica’s advice - good, legal advice; thank you, Monica.
Mr. Currin: Thank you for keeping us straight, Monica, because sometimes we forget. Okay, rebuilding strategies, and, Rick, you said there is another alternative that has been suggested by the team.

Mr. DeVictor: Yes, this was actually suggested by staff in the last couple of weeks. The current projections hold F steady throughout the rebuilding timeframe. However, if you look at the tables, the allowable mortality increases each year because as your stock rebuilds that increases. However, these current alternatives have a constant catch, so it holds catch steady.

What we have here is possibly a different approach where in Year 1 you would set the ACL according to Fmsy. That's your overfishing threshold, and you can see what that value would be. It would be 82,000 pounds whole weight. Then your ACL would actually increase each year, but you would set an ACT and hold it at that 82,000 pounds.

That is what your closure would be built around, that 82,000 pounds. We see that as a way where that buffer between ACL and the ACT would increase each year as your stock rebuilds. We just bring this before you for maybe having this as an additional alternative in the range.

Mr. Geiger: Thanks, Rick. You know, this is very attractive. The only problem is that first year being 82,000 pounds, which coincides with - I guess that's pretty risky because that's right at the level, isn’t it, John, as I recollect 82,000 pounds is the limit.

Mr. Carmichael: Yes, that's getting right at the limit in that first year.
Mr. Geiger: So in that first year, if we exceed the limit, what happens?
Mr. Carmichael: There is a chance you could have overfishing occurring.
Mr. Geiger: Are we allowed to put a measure in place that has the potential of continuing overfishing?

Mr. Carmichael: I think that would be the most risky thing you can put in place is ABC equals ACL equals ACT.

Mr. Waugh: I think if you look at Table 4-16, this helps explain what the suggestion is. The earliest regulations could take effect would be 2010. If you look at the level of mortality that we're talking about, the most liberal it appears that we could set that is based on the Fmsy, which is a total mortality of landings plus discards of 82,000 pounds.

The suggestion is in Year 1, 2010, to make your ACT equal to that 82,000 pounds; calculate the size of your area closure based on that 82,000 pounds; and that closure stays in place. You are being risky that first year, but you can see from the projections in the second year overfishing would not occur unless total mortality was above 131,000 pounds.

The idea here is to keep your ACT, your target set at the 82,000 pounds with the area closure that is required to keep the mortality below that number. Your ACL would increase as these figures are shown here. In 2011 it would be 100,000; 149,000. This projection stream comes from your oy of 75 percent of Fmsy.

That recognizes that as this stock rebuilds, you're going to have more interactions. Your accountability measures would not trigger unless your total mortality exceeded your ACL. You can see that your ACLs are still below the overfishing level, so you have a good bit of risk aversion from Year 2 onwards. Year 1 is right up against the limit.

I think we can make a good justification for doing that given that what you're talking about is a very large closed area in order to limit mortality below that 82,000 pounds. There is lots of justification with other fisheries where once you close an area and eliminate mortality the fish rebuild very quickly.

Mr. Geiger: I guess I would ask Rick or the committee or somebody; did anybody do a block outline of what the closed area would look like under this particular scenario so we could compare what the closed areas would look like and see how much bang we're getting for our buck?

Mr. Waugh: Yes, the alternatives that you have - when you get to the management measures, we have the correct figures for what mortality would be expected to result based on John's analysis for each alternative. The only alternatives that keep total mortality at or below the 82,000 pounds are Alternatives 4 and 6 . Each of those, based on the updated projections that John has done, the expected mortality would be 74,013 pounds. Alternatives 3 and 5 , the projected mortality is 92,113 pounds, so that would exceed your ACT and the overfishing limit in Year 1.

Mr. Carmichael: And I think you can judge it against the projections which Andy showed yesterday, which are the next step in the evolution of this approach by judging the percentage reductions and the target they were looking at of 85 percent - I forget the exact number, but you can use those as well, because you're looking at what percent reduction the 82,000 pounds represents.

Dr. Crabtree: The strategy, the way it's laid out with the ACLs going up and all, I don't have an issue with that. One difficulty I see with it is the setting of the ACL as total removals, because what that means is we're going to basically track discards, and accountability will kick in if we go over the discards.

The problem with that is all the discards estimates we have are self-reported numbers, and my worry is that we're going to cause a change in reporting. The other thing is if this works the number of discards is going to go way down and so the CV around the estimates is going to go way up. Because the number of fishermen who report discards is going to come down, this becomes kind of like a rare event sort of situation if it works, and you're going to have a highly uncertain number, and that means it's going to bounce around a lot.

If we're talking 82,000 pounds of discards and that actually works, I would guess that's going to have - how many fish is that, three or four pound average, 20,000 fish discards? That's going to have a big CV and that's going to be a problem. So, I have a lot of difficulties with setting up the accountability measure to revolve around self-reported discard estimates, and I would prefer not to do it that way.

The alternative way, it seems to me, to set up the accountability mechanism is to - we're going to have to have fishery-independent monitoring. We will have to find some way to expand MARMAP, I guess, and do that, and I think that's the recommendation we got from Carolyn and the SCC on it, so let's just say that's going to happen to put aside the financial end of that.

It seems to me then we could come up with a different way of having accountability, which would be track the increase in CPUEs and see if it matches the projected increase in biomass. If it does we're on track and nothing happens. If it doesn't, then we've got a problem, accountability kicks in.

It seems me that we could set this up so we're going to look at those two periodically, every couple or three years, something like that; and then if we don't see the increases that we expected, we have accountability, and I guess then we've got come in and make adjustments to the closed area. I don't know what else we can do.

It seems to me, though, that that's the preferable way to doing this because I'm afraid we're setting ourselves up to monitor numbers that aren't going to have much reality at that point, and they're going to create real problems for us. That is one issue I think you ought to think very carefully about.

The second issue is the magnitude that we're putting in here for the ACLs. We have some projections now that the Center has given us that factor in this spike in recruitment. I think, John, while in the long run I don't think that makes much difference, I suspect in the initial couple of years, while that recruitment class is still out there, it may make a fair amount of difference. I think you guys ought to get with Erik and take a look at that.

I think what is going to happen, the way you have it now, with 82,000 pounds, I think you're going to blow it out of the water right off the bat and not because your management didn't work, but you're going to blow it out of the water because you've still got some of that year class that's out there, and so you have underestimated what is out there.

Then my final comment to you would be this is predominantly a recreational fishery. If you're going to go down this path, I would take that 82,000 pounds and convert it to a number because you're going to have a lot better estimates of discards. If you think the weight estimates of the landed catch are hard and are variable, what basis will you have to assign a size to the discarded fish?

There aren't going to be any red snapper landed. There will be no weights. I don't MRFSS will estimate a weight for the discards because they won't have anything to do it with. I think all you're going to get from MRFSS at that point is a number, and I'm not sure what we'd do to get the weight out of it.

There are a lot of problems here if we go down the path of an ACL that's total removals that you're going to have to deal with. I think you ought to think really carefully about that because I do think alternative - and I think preferable to me would be to track improvements in stock status and somehow tie that into the AM.

If you do it that way, then I don't know if the recruitment pulse issue is that big a deal anymore; but if you're going to go down this sort of path, I think you better figure out what that recruitment pulse means initially. Then you better be prepared that you're largely going to be tracking an ACL that probably isn't going to have a whole lot of reality to it.

Mr. Carmichael: I think Roy's concerns about setting the ACLs and have it tied to discards, quite often I think that is a very legitimate issue. If you consider the way the MRFSS operates and the areas where red snapper would still be encountered that are left open to other snapper grouper fishing, those are being left open because they don't encounter many.

The CVs probably will be extremely high on the discards. We know CVS on discards are higher than CVs on catch. We've talked about the need to account for the MRFSS, CVs and PSEs when setting accountability measures for the recreational fisheries. It's true we won't have estimates of the weight of those discarded fish.

If the size structure improves and discarded fish get heavier, we'll have a very little way of knowing that because they're thrown back and by definition you don't see them and get to weigh them. There are a lot of issues in trying to fit what is essentially becoming bycatch removals into the whole concept of ACLs as put forth in the Act.

The year class is something that really brings this to the forefront because we may very well not have a rate of fishing out there right now that equates to overfishing occurring, which is really what we're really trying to prevent. Despite the fact that because of a big year class you have a greater number of pounds being landed than what you would have predicted would be associated with that rate of removal, that big year class is going to have a big impact.

Then when that year class is gone removals can go down though the rate may still stay high and you think, oh, we can shorten this area when in fact you don't really know about the rate. You're just seeing less fish out there. You have got to be careful not to operate out of phase in regards to trying to meet an ACL and recognize what the relative year class strengths are doing to that, because ultimately what you're seeing is the result of both the rate and the current abundance, and it's that current abundance that is really giving us the biggest trouble.

Dr. Ponwith: Mr. Chairman, I'm not on your committee, but I do want to stand in support of tracking this in a way other than accounting for discards. Again, on its face value it seems like a good idea, but whenever you find yourself straying into that rare-event scenario it is going to cause problems in terms of the CVs associated with those estimates.

Mr. Geiger: Mr. Chairman, I'd like to go ahead and make a motion that Alternative 4 be our preferred alternative.

Mr. Currin: Motion by George to select Alternative 4 as our preferred alternative for a rebuilding strategy for red snapper.

Mr. Geiger: If I get a second I'll discuss it.

Mr. Currin: Is there a second? Second by Robert. Discussion? George.
Mr. Geiger: Although I think it is a creative idea that the team came up with, to me it adds more risk, and we've got enough risk in everything we're doing and enough uncertainty in everything we're doing that an additional risk is just untenable to me. Certainly, in these alternatives that we've got identified we've got the high, we've got a low, we've got a midpoint.

I think taking into account again socio-economics, although it's not primarily what we need to focus on here, it is in the back of everybody's mind. I just think that's a mid-road with the least amount of risk, not the least but an acceptable amount that will get us to where I believe we need to be with the least pain.

Mr. Currin: Other comments or discussion on the motion? Roy.
Dr. Crabtree: I guess I want to make a motion for another alternative to be added into this one.
Mr. Currin: Well, can we deal with this motion that's on the floor right now? There is a motion to select Alternative 4 under the rebuilding strategy for red snapper as our preferred. Motion by George Geiger and seconded by Robert Boyles. George.

Mr. Geiger: Well, I’m very curious to hear any alternative proposals that can come up. I would like to put the motion on hold, Mr. Chairman, in lieu of having additional alternatives provided by the Regional Administrator.

Dr. Crabtree: Okay, what I would like to add here is I would like to add another alternative that sets an ACL of zero but specifies that landed catch and then discusses the accountability mechanism. In the monitoring and the way we're going to be accountable for the success of this is we're going to implement - the Science Center or whoever is going to implement an expanded fishery-independent monitoring program, which is discussed later in the document.

What we're going to do is track red snapper CPUEs in that program against the projected increases in biomass. Then accountability will be based on the increases in CPUEs. We're going to have to take into account the error and we're going to have to get Erik and Company to advise us on that, but we're essentially going to track that what we're seeing in the independent program is reasonably close to what is supposed to be happening.

As long as that's the case, then it's working; but if it's not case then we have to come in and make adjustments. Now, that's not conventional. I don't think that is out of compliance with the ACL Rule, but this is a very unusual situation and I think we've got to think a little bit differently on it. I just don't think these other ones are going to work for a variety of reasons.

I would like staff to fill in the details and work with the Center as to how this would go. That's what I'm talking about and you guys I guess can deal with George's motion on a preferred. I don't know that I'm prepared to choose a preferred in this one yet, but I'm not going to support any of these current ones because of the problems with them.

I just don't want to see us seeing here three years from now with ACLs that are all over map because the science can't support what we're doing anymore, and I would rather take a somewhat unconventional approach here but one that I think the Center can back and we think is going to work and go down that path. I'm to a point right now where I don't see any option before us other than an expanded MARMAP type program that we're going to use to modify this. We are going to have to come up with the money to do that, and I just don't see any other way to get at this. That's my suggestion.

Mr. Currin: Yes, and I don't disagree with exploring that, Roy. I guess I just hope that whatever measures of CPUE we get don't have the same or worse CV problems that the estimates of discards do.

Dr. Crabtree: And I don't know if they will or won't, Mac, and I'm not saying this will work. I'm saying I want folks to sit with - I'd like John and Erik to sit down and see if they can't make sense out of this and come up with something that will work. I mean what have we accomplished if we set an ACL that's discards and so every fisherman out there quits reporting discards?

Then we've just messed up our own data collection and we still don't know what is going on and we're even worse off. I'm not saying this will necessarily work, but I guess what I'm saying is before we choose a preferred here let's give this a good look and come back to it. I don't think whether we choose a preferred right now on this at least on the ACL and all is going to set us back much.

Whether you go ahead and vote for the preferred that George has suggested, I'd still like to see this worked up so that we could come at the next meeting and make a change on it. I'm not getting at the whole issue of whether your mortality rate is going to be 75 percent of whatever or any of that.

Just bear in mind that if your strategy is based on 75 percent of F 40 percent, then the closed areas Andy was talking to you about will become bigger because those were based on F 40 percent and not 75 percent of F 40 percent. But that's a little different issue and you can make that judgment call on that. I'm strictly dealing with mostly the accountability part of this.

Mr. Geiger: I would like to see this worked up as well. Again, these are preliminary preferreds and it would just allow us to move forward. We can always make the change at the next meeting. This is way outside the box. I haven't heard the Science Center endorse it or say they could do it or support it in any way, and we don't have any flesh around it.

I would stick with my motion to select Alternative 4 as the preferred; again, preliminary preferred. We can make the change when we see the results. I'm very reluctant to look beyond what we're doing now to see what the results of what we're winding up with ends up with because that's not the way to manage this stock. Let's take it one step at a time.

Mr. Currin: All right, the motion is before us; is there further discussion on the motion? John.

Mr. Wallace: Can you give me a little conversation on how ACT is going to apply in these motions? Are we going to have an ACT lower than 61,000 or are we required to put an ACT or is the ACT going to be equal? I'd just like a little detail in that.

Mr. Currin: Rick, John was asking where ACT and how ACT figures into all of these alternatives that we're considering at this point, the rebuilding strategy alternatives.

Mr. DeVictor: ACTs are not required and staff's recommendation was to have a target to set an ACT. That's currently not on the table now, but ACT, as the final rule came out said ACT is more along the lines of an AM where it's just another way to ensure you don't exceed your ACL, and they sort of downgraded the requirements of an ACT.

Mr. Carmichael: Didn't the committee pick a rebuilding target year, a year by which you want the rebuilding time or rebuilding time period already?

Mr. Currin: We did; it was the maximum; Alternative 4 I believe it was.
Mr. Carmichael: Now, picking a rebuilding strategy based on a fixed F, that carries with it a specified point at which time we estimate the stock to be rebuilt, so I think at the 75 percent Fmsy level, looking at the March projections, there is a 50 percent probability the stock is rebuilt by 2027.

This results in a different rebuilding time period than what you did whereas you could, by having picked a rebuilding time period, try to, say, develop a fixed yield or a fixed F strategy that rebuilds by that point, recognizing that you are certainly bound by ending the overfishing at the F 40 percent level or F 30 percent level, depending on if you take that decision.

Mr. Currin: So taking that approach would require a different analysis and alternative, kind of back it down from there, I guess, or back into it.

Mr. Carmichael: Right, the fixed F 75 percent rebuilding strategy means you rebuild in - 50 percent chance in 2027.

Mr. Currin: Which is eight years sooner than the one we picked earlier.
Mr. Carmichael: Well, I guess there are some discrepancies in the different tables because we've had so many projections that have been done, but at any rate it gets done significantly sooner. Just so you're aware of that.

Mr. Geiger: And correct my thought process here if I'm incorrect, but I just believe that as we move through this process, because of the magnitude of what doing here, that we've got a stock assessment in 2010; we've got another update in 2014, if my memory serves correctly; and it shouldn't be too long before the next benchmark makes it for red snapper, you know, within three years after that, probably, once you get to that point in the schedule.

If what we sense is correct here with this great recruitment year and if we're able to salvage enough, we're going to see an increase and potentially, maybe not in 2010 but in 2014 an improvement in the stock which would enable whoever is lucky enough to be sitting at this table then to make adjustments to the measures that we have in place now.

Mr. Carmichael: Yes, certainly.
Mr. Geiger: So, you know, what we're doing here is we're working almost in a vacuum and looking with tunnel vision what it is going to be when in fact there are places within the tunnel where we can take side roads and modify our route to get to the end result resulting from favorable stock rebuilding and results from stock assessments as we move forward. We've got to get started at some point.

Dr. Crabtree: Well, just a couple of points; one, I would guess that we'll have an update of the assessment next year, but there won't be another update after that because the whole way the stock will be assessed will have to completely change because there is not going to be -

Mr. Geiger: Well, a benchmark.
Dr. Crabtree: It would have to be a new one, and everything then will be based on whatever fishery-independent monitoring program that's in place. I guess at that point you're basically just looking at how much did the CPUEs go up, which gets us back to the other one. Just be aware if what you're trying to achieve now is 75 percent of F 40 percent, Andy made a presentation of the closed areas that get you to F 40 percent, so those closed areas will have to expand in order to get you to 75 percent of that.

Because the closed area already encompasses the area where most of the discards are, it could be a substantial expansion of it. It's probably just a few percentage points more in terms of the percent reduction, but you might have to incorporate a fair amount of more area into it to actually get there, and I don't know that anybody has looked at that at this point.

Mr. Geiger: I think that's the next step.
Mr. Currin: Further discussion or comments on the motion? Is there objection to the motion? The motion is approved with three objections. Now, Roy, you had another suggestion I think for an alternative for staff to add to this action.

Dr. Crabtree: I would move that we add a new alternative that, one, has the ACL expressed as zero landed catch; and then, two, sets up an accountability mechanism that is based on monitoring the expanded fishery-independent monitoring program; and that then tracks increasing CPUE abundance over time; and accountability is based on that abundance increasing at an acceptable rate.

I think, Mac, that basically captures it, and I would ask that John and the Science Center work on this, and I give them broad license in order to come up with something that they think is scientifically defensible and workable.

Mr. Currin: I think the staff is clear on the direction here, are you not? Seconded by Robert Boyles. Further discussion? John.

Mr. Wallace: By doing this, will this put some added pressure on whoever to give us the funding to expand this monitoring system?

Dr. Crabtree: I certainly hope so.
Mr. Currin: Further discussion on this motion to add an alternative? Is there objection to the motion? I see none; that motion is approved. Mark.

Mr. Robson: Just a followup to John's comment about a strategy that matches up with our current preferred for a rebuilding schedule; do we need to have - is it important to have that alternative in this part of the document?

Mr. Currin: Who are you asking; if you're asking me, I don't know.
Mr. Robson: Well, I'm asking staff.
Mr. Carmichael: Well, I think you may have that based on how they derived that in the first place. It's like if the F 40 percent fixed does it within that time, I would have to look, but I think it would perhaps be nice since we're going to probably have to get some more projections. If we do have to get some more projections, it is to look at the F that rebuilds by this time; that would be the classic Frebuild alternative.

Ms. Shipman: I would like to see it in there. I think there have been so many questions from the public in terms of the rebuilding, I think it's important from a transparency issue for everybody to know what that would look like. I would like to request that be an additional alternative.

Mr. Currin: Okay, do you want that as a motion or is just direction to the staff okay, Gregg and Rick, on that?

Mr. DeVictor: A motion.

## Mr. Currin: Okay, Susan has offered a motion to ask staff to develop a -

Ms. Shipman: The rebuilding timeline, yes, based on F 75 percent with our timeline of 35 years.

Mr. DeVictor: At F 75 percent.
Mr. Currin: At 75 percent?
Ms. Shipman: Yes.

Mr. Currin: All right, is there a second? Second by Mark. Further discussion on the motion? Any objection to that motion? All right, that motion is approved, then. It's almost lunchtime, and I want to make sure, Jack Travelstead, before you have to get out of here that we have addressed your council's concerns as best we can at this point and you're okay with where we are regarding that fisheries management unit and where it stands.

Mr. Travelstead: I think we're very much okay although it's not clear to me whether you're going to get to any discussion of Amendment18 and whether the concept of an extension of the management plan to the north might be a part of that amendment. The bottom line here for the Mid-Atlantic is we're interested in having some say in how the species are managed off the MidAtlantic.

The message I want to leave with you is that Virginia is serious about how we are trying to manage these species. We put some regulations in place a couple of years of ago that were quite similar to what you all had in place at the time, and just last month we added these additional reporting requirements that we think are going to help out.

My agency is preparing to fund a project out of Old Dominion University that will collect some additional biological information on these species off Virginia that will provide aging of hard parts and things of that nature. We're going to send that proposal to Bonnie to have her look at it to make sure it's adequate and meets the kinds of needs that you all think we should be collecting.

We have a nice little fishery there off of Virginia. At least for right now it appears to be healthy. We're not naïve about what can happen to those kinds of species in a relatively quick period of time, but we're interesting in putting the kinds of rules in place that will keep it from going downhill. We just want to have some say in that process.

I think the governance that the Mid-Atlantic has in mind is that if the range is ever extended off the Mid-Atlantic, that the Mid-Atlantic Council would establish its own grouper/tilefish committee to advise this council on how to manage the species off the Mid-Atlantic. We don't want a separate management plan off the Mid-Atlantic. You guys will have the final say in how the species is managed, but if we could have a committee that's composed primarily of MidAtlantic folks with a couple of South Atlantic folks, then I think that would meet our needs.

Mr. Harris: To that point, as Jack knows Red and Rick Robins and I have had a lot of discussions about this, and you were involved in those in Boston as well. That would be my intention, is to have a separate advisory panel as well as a committee that would basically work with the South Atlantic Council to establish management measures for that northern management unit.

Rather than trying to complicate this by having a joint plan or all the implications of doing it that way, we'll try to work through that in such a way that it is the least painful for both councils and provides the best management for those species in that area. Thank you.

Mr. Currin: Jack, thanks again for coming and travel safely. As far as your first question, currently it is in 18. We haven't gotten to that discussion, and I can't promise you that it will remain there, but in all likelihood it will. We will have to see how it ends up at the end of the day, but we'll keep you posted.

Mr. Travelstead: I can always come back.
Mr. Currin: Yes, you can and you're welcome anytime. Let's recess for lunch and be back at 1:30.

The Snapper Grouper Committee of the South Atlantic Fishery Management Council reconvened in the Ballroom of the Hutchinson Island Marriott, Stuart, Florida, Thursday afternoon, June 11, 2009, and was called to order at 1:30 o'clock p.m. by Chairman Mac Currin.

Mr. Currin: We will reconvene the Snapper Grouper Committee, and I think our next item in 17 is on Page 233, the Red Snapper Management Measures.

Mr. DeVictor: Okay, we have a series of management measure alternatives for red snapper. And as was brought up, these alternatives are tied to the previous action, which is the rebuilding strategy that sets the ACL. Running through these, we have the status quo, which is the 20 -inch size limit and the recreational two-fish bag limit.

Alternative 2 would prohibit all commercial and recreational harvest, possession or retention of red snapper year round in the South Atlantic EEZ. Then we have a series of spatial closure alternatives that would prohibit harvest year round to both sectors of all snapper grouper species. Just to point out, the team has recommended that we add language that would prohibit all commercial and recreational harvest of red snapper to each of thee alternatives. Previously it wasn't in that, so we added it here for your consideration.

Alternative 3 follows four logbook grids, and you can see the numbers there, and the depth of 98 feet to 240 feet. Alternative 4 expands that and includes seven logbook grids, and again there are maps showing this on the following pages. That's the depth of 98 feet to 240 feet. All of these have allowable harvest - and this should probably be discussed - of spearfishing, golden tilefish harvest and black sea bass pot fishing in all these areas.

Alternative 5 is the four logbook grids, but it follows the lines of the grids and it does not come in 98 feet to 240 foot depth. Alternative 6 are the seven logbook grids; again, going by the grids and not coming in. Then we have alternatives to modify the bag or size limit to reduce the bag limit to one and remove the existing commercial and recreational 20-inch size limit.

Finally, the team has added for the council's consideration an alternative with three subalternatives dealing with transit and how to handle transit. These are just alternatives that the team has put together. The first one would be that prohibition or possession does not apply to a person aboard a vessel that is in transit with fishing gear appropriately stowed.

If I recall correctly that's maybe how we have the MPAs currently set up, but I'm not absolutely sure of that. 8B would not be aboard a vessel that has snapper grouper species on board if the vessel is in transit, and then 8C, the prohibition on possession doesn't apply to a person aboard a vessel that has wreckfish on board if the vessel is in transit.

I can't directly recall the wreckfish idea, but I think that was tied to there would be a total prohibition on deepwater species seaward of these closures, and wreckfish would be one of the species that they would allowed to harvest in deep waters. There has to be some discussion, now that the rebuilding strategy, the preferred has changed - again, there is a linkage here, and the current preferred was 61,000 pounds. It appears that these would not achieve those reductions, and John has worked up the poundage that would come out of these, what the expected fishing mortality of red snapper would be. I could go through those, but they do not get down to 61,000 pounds.

Mr. Currin: Questions or comments? I assume everybody is okay with the staff and team's suggestion to add this sentence to each of those alternatives. John, you had a question, I think.

Mr. Wallace: Well, I think you've got it addressed in the transit part, but I was just wondering if we wanted to put wreckfish included in each of the alternatives like we've done tilefish, but if it’s addressed appropriately in the transit amendment I'm okay with it.

Mr. Robson: The discussion of Alternative 7 about size and bag limits mentions that by itself, of course, it doesn't guess us what we need, but it indicates that in combination with other alternatives relating to the closures it might help. Has there been any analysis of that in combination with the other alternatives, either the bag and/or the size limit and how that would affect the closure areas?

Mr. DeVictor: Currently what is in the document is the bag limit analysis going from two to one. As you know, that gets you about 3 to 4 percent. The rest of the alternatives with the wording would totally prohibit harvest throughout the entire EEZ as they currently stand now, but it hasn't been done showing going to a bag limit of one and then having the closures in place for the snapper grouper species. I don't think that combination has been done.

Mr. Waugh: Just some clarification; so, for these other alternatives, Alternatives 3, 4, we're going to allow people to fish in there as long as they're fishing for golden tile and as long as they're spearfishing. I mean, that certainly creates law enforcement issues.

Those of you that were around years and years ago when we were talking about prohibiting powerheading, we're going to receive a lot of criticism of these closures, but to tell people we're closing them but we're going to allow powerheaders in there, that is going to be a tough thing to sell to the public. Plus allowing golden tile, you know there can be a lot of discard mortality in there; anybody who is fishing just says they're fishing for golden tile I'm just making sure that is indeed what we want and as well as black sea bass.

Mr. Geiger: I certainly agree with you, Gregg, and I'm one of the ones that brought up the issue about powerheads, but we're taking this, again, to public hearing. I have already got a couple of
calls about it on both sides, as a matter of fact. I think that we need to take it to the public and give the public a chance to comment on it. We can always modify them again at the next meeting.

Mr. Currin: Other questions or comments? Good point Rick or Gregg made earlier; you know, a number of these alternatives would achieve the necessary reductions at the ACL set at 82,000 pounds, so our preferred selection earlier on I think had an ACL of, what, 61,000?

Mr. DeVictor: Yes.
Mr. Currin: And I think Alternative 6 is the only one in the document here that I have so far that would achieve the necessary reductions.

Mr. DeVictor: I should have mentioned this; the notes in italics underneath do not apply anymore. John did revise his analysis and I have those numbers and I could project those. John may want to speak to this, but the estimated total mortality under Alternative 6, which is the seven blocks, is 74,013 pounds of red snapper. Now there still needs to be some work on that where it incorporates what SERO is working on, Andy and Nick Farmer, because that number I don't believe incorporates Amendment 16 actions.

Mr. Carmichael: That is correct, there are a number of changes that were endorsed through the SSC and feedback received from them that aren't reflected in those preliminary numbers done before the meeting.

Mr. Currin: I guess where I was going with that is consideration of anything that wasn't going to meet our goal we could move to the appendix at this point, but until all those projections are done and the estimates of the reductions are incorporated it's probably best to kind of leave these as they are at this point. Mark.

Mr. Robson: Did I hear correctly that there are some recalculated numbers? Could we at least look at those for those closed area alternatives now to update what we're looking at in the document?

Mr. DeVictor: Those numbers I have here and I could go through those. Again, this is what John worked on and John was working on a poundage mainly. The presentations you heard yesterday were dealing with a percentage reduction, trying to get to the 87 percent reduction, so there are two different targets here. I can go through what John came up with what the expected total poundage would be, total mortality in pounds.

It's the same number for the ones that are the four logbook grids and then the ones that go in 94 feet to 240 foot depth. You can't really come up with a different poundage between those two because there is no way to split that up currently. Alternative 3, which is the four blocks, estimated total mortality under this alternative is 92,113 pounds of red snapper, so that would apply to those two four-block closures.

As I said before, the seven-block closure is 74,013 pounds of red snapper. I think we have an attachment that outlines how this was figured out; don’t we, John, to the Snapper Grouper Committee, or at least it was an attachment to the SSC.

Mr. Carmichael: It was Attachment A-22 at the SSC, and I'm not sure if it was linked to again in the Snapper Grouper Committee, but it is presented in two ways, both the total removals that are expected as well as the percent reduction. What you saw yesterday, which was taking the next step, was in percent reduction terms.

Of course, the total removals are tied to what you ultimately decide for the rebuilding strategy, the Fmsy proxy and all of those things. We will have to sit down and go through all of your decisions and see what the final number falls out to be.

Mr. Currin: Other questions of comments? There is a lot we don't know as far as finalizing these actual numbers on these at this point. I take it no one is interested in trying to select a preferred alternative for the management measures at least for the closures. The transit alternatives are there. Anyone wish to consider a preferred alternative or preferred subalternative for Alternative 8 at this point? John.

Mr. Wallace: On these transit provisions, are they going to have to stow their gear if they have wreckfish or any of the other species on there? Some of this gear is not really storable with these. I guess you could pull them out of the pipe and shove them under the deck, but on these wreckfish boats it's a pretty much permanent reel. I'm not sure just how permanent they are, but most of them that I've seen are attached pretty solidly to the deck.

Mr. Currin: Yes, they use bandit reels; is that what they use primarily, hydraulic reels?
Mr. Iarocci: To that point, Mr. Chairman, we went through this in the Sanctuary in the Tortugas deep water with different types of gear and bandit gear or longline gear. Depending on whether the gear was stowed; as long as the bandit gear did not have a chicken rig or a multi-hook rig on it that looked like it was baited and ready to fish - they usually fish them right down to a big barrel swivel; and if the swivel is connected with no hook, that would cause for stowed gear, but that was usually at the discretion of the coast guard or the enforcement entity, whether it was the FWC or the coast guard of the Sanctuary that was doing it, so I think it would probably would be the same as what we're doing and talking about.

Mr. Currin: Yes, this can't be the first time this has been dealt with as a transit issue, somewhere either here or in the Gulf. I know earlier we had some wording that we pulled out of the Gulf to provide us with a transit provision in another amendment. David.

Mr. Cupka: Mr. Chairman, did I understand earlier that a statement was made that Alternative 7 wouldn't achieve it without combining it with one of the closure options, yet all of the closure options prohibit possession, so I'm not sure why we have this one in here if we're going to word all those other options the way they are. We might want to consider removing that and putting it in the appendix.

Mr. Currin: Yes, I think you heard that question asked, David, and you make a very good point. I think probably the reason it has been in there to date is because of extreme optimism that perhaps we might find some way to get to that point, but that's not looking very realistic at this point. It's up to the committee as to whether you'd like to see that moved to the considered but rejected appendix or maintain that glimmer of hope.

Mr. Geiger: And my comments go back to the stowed gear and Tony kind of hit on it, but there has to be a definition somewhere for stowed gear in these closed areas that we should be able to lift very easily; or, create language much as Tony described that terminal tackle should be removed and stowed below deck and flesh that out a bit more before we just accept it as stowed gear.

Mr. Currin: Tony, you had something I think earlier to that point or did you not?
Mr. Iarocci: Yes, I did make my point, but back to what George has just stated - and, George, a lot times it isn't below deck. They do have gear boxes on board where they do keep the multihook rigs, but they're stowed and they not connected to the bandits. You could say stowed fished gear and not connected to the bandits if that's main type of gear. Like I said, I would refer this to some of the enforcement people because it's going to be at their discretion on how this would be enforced on the water.

Mr. Geiger: You know, in our regulations for Deepwater Marine Protected areas there is a whole page - Page 5, as a matter of fact - regulations within MPAs, and it goes through the definitions of fishing gear appropriately stowed means terminal gear, longline gear, trawl and trinet gear, gill net gear and crustacean trap gear. I mean, we have already worked on that I think, and we have probably looked right off of our own regulations.

Mr. Currin: And that's my assumption as well. I think staff is going to work on that and I can certainly trust them to do it.

Mr. Robson: And to these issues of enforcement, that is a concern that I'm hearing from our own agency enforcement staff, and there are varying ways to describe properly stowing gear, but you're going to have an on-the-water enforcement problem with that kind of provision. I don't know how to get around it in terms of allowing some legal transit through a large area like this, Appropriately stowed, if it's loosely defined, is going to make it near impossible to enforce somebody having fish illegally and being able to get around it by just stowing gear away.

Mr. Geiger: August $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ there is going to be a Law Enforcement AP Meeting, and they'll have an opportunity to look at this issue, I'm sure.

Mr. Currin: Again, from my perspective I think the staff is going to have to better define what properly stowed is. I think to date they have not, but as you pointed out, George, there are existing regulations regarding the MPAs. There are regulations for closed areas in the Gulf that address this. I don't think it's a big deal. Correct me if I'm wrong, Rick, but properly stowed was just kind of placeholder to be more succinctly defined in the future; was it not?

Mr. DeVictor: Yes.
Mr. Currin: Okay, is everyone comfortable with allowing the staff to come back with some of those rather than trying to craft them right now? Okay, anything else on that particular issue? Back to Alternative 7, then, is this an alternative we want to maintain in the document? It may well send a false sense of hope to folks. It doesn't seem to be realistic one to me. David.

Mr. Cupka: Mr. Chairman, that's what I was thinking. I know we've heard a lot comments and a lot of the questions raised from the fishermen, you know, why can't we lower the bag limit or do something with the size limit. If it's not going to achieve it without putting it in combination with something else which prohibits possession, I think that we ought to remove. I would like to make a motion that we move Alternative 7 to the considered but rejected alternative section.

Mr. Currin: Thank you, David; a motion by David; is there a second? Seconded by George. Discussion? Duane.

Mr. Harris: Well, the one concern that I have about removing it is if we leave it in there and it's analyzed and the fishing public knows that we did look at it and we did analyze it, and the analysis is right there for them to see, and so that's the only concern I have about removing it and putting it in the appendix.

Mr. DeVictor: If you move it to the rejected alternatives, we can still keep that analysis with that action and describe it. It's there but it would just tell the public that it's not a reasonable alternative.

Mr. Geiger: Mac, when I raised my hand it was interpreted as the second and I went ahead and did that, but my comment was going to be I would prefer to see the analysis done; and when it's removed to the back of the document, that the analysis be there with it so the people, when they read, can see that the analysis was done and it was just an untenable alternative.

Mr. Currin: Duane said that satisfies his concern. Obviously, the analysis has been done. I think what Rick just said is we would get 2 or 3 percent reduction associated with it. Further discussion on the motion to move Alternative 7 to the appendix? Brian.

Dr. Cheuvront: Just to clarify, then do we just want to add along with the analysis at the end of the motion just so that it's clear that was our intent.

Mr. Currin: Is that okay with the motion maker?
Mr. Cupka: Yes, Mr. Chairman, that's fine.
Mr. Currin: George, you're okay with that? Okay, any further discussion on this motion? Any objection to this motion? I see none; that motion is approved. All right, Rick, what else do we need on the management measures? It doesn't seem to me that we can make much more headway on these at this point until some of that further analysis is done. Roy.

Dr. Crabtree: Once again, one of the things that we're going to have to do at least for the alternatives that involve a depth contour is we're going to have to set up way points and lines. I think we need to really recognize in this particular case, because we're dealing with recreational fishers, we don't want hundreds of way points here.

We're going to need to try and come up with some straight lines, and it looks to me like those are some pretty complicated shapes. I think staff really needs to get going on how to draw these, but I think most of these guys aren't going to have plotters and all these complicated things necessarily. I think that's something that we need to take a look at in the next council meeting.

Mr. Robson: George, you indicated the Law Enforcement Panel is meeting the first of the month?

Mr. Geiger: Yes, that would be accurately characterized. I have been told that the $3^{\text {rd }}$ and $4^{\text {th }}$ was not good and the $4^{\text {th }}$ and $5^{\text {th }}$ is not good, so somewhere the first of August there is going to be a meeting, however.

Mr. Robson: Will council staff have the time between now and then to look at way point issues and also look at the transit issues and be able to discuss that with the AP?

Mr. Waugh: When we were discussing and meeting with law enforcement and NOAA General Counsel, we alerted them to the fact that this alternative was in here. We've already begun discussions with them. I think the very preliminary work that Roger has done is on the order of 20 way points; but before you all see anything with way points, we will work with law enforcement, we will have their input, and it will be something that is the best that we can do working with them.

Mr. Geiger: One of the problems I'm wrestling with in my mind, going back to my days when I did this lot, more than I do it now, is the idea of having less way points. You know, Roy made the comment that not many boats have plotters, and that's the case. A plotter certainly givens you an indication of a straight line, but if they're working off a GPS and they're going to a specific way point, there is no telling whether that way point that they're going to is within or outside of that line that we're marking.

It would seem to me that close to places where you're going to have recreational people access those areas, like within inlet boundaries of some type, perhaps the number of way points should be greater so that people have the opportunity to see where their way point goes in proximity to numerous way points that are published as opposed to have to try and figure out what the imaginary line is between two very distant way points. Is that clear or not? That needs to be a discussion point as well I think, and we'll talk about that during the AP meeting.

Mr. Currin: Yes, that's probably worth talking about. I'm not sure on the coast of Florida that there are going to be many areas that will be defined as not high traffic areas. I don't know but it's worth considering in my mind. Let's move on, Rick. Everybody okay with where we are on management measures right now?

Mr. DeVictor: Okay, next on PDF Page 255 is the last action item concerning red snapper and that has to do with the red snapper program. I think you should have some discussion of where this would fit into the document. What has happened today is discussed under one alternative under the rebuilding strategy.

We have an action here and then also the team has recommended, as I'll outline in a second, that perhaps - it's Section 4.18 - that part of this should be discussed under the monitoring section of the document. I'll just go through what we have currently in the document. Alternative 1 would utilize the existing data collection program to monitor the rebuilding progress of red snapper. I won't read those but they're listed there.

Alternative 2 would establish a fishery-independent monitoring program to track the progress of red snapper. The team discussed this to some degree and felt, well, there is currently one in place called MARMAP, and maybe this shouldn't be an action. They felt that perhaps this can be discussed under that Section 4.18 on how to augment the current fishery-independent program, and that includes adding additional gears to the program, rod-and-reel sampling, scuba surveys and such; then also some discussion in that section on how to expand the geographical range.

Then finally there is an alternative to establish this idea of a - well, at that time what you talking about in March was research set-aside program involving headboat operators. This wording comes exactly from the research set-aside program that the Mid-Atlantic Council has in place. There is probably more detail than what you want down here.

For example, there is a sentence about proceeds of the sale of the research quota are used to pay for research costs. I think you all should discuss this. We had a conference call with them and they outlined several problems that they have, including they do it each year and setting that up each year causes a problem by getting everything done in time. Those are the current three alternatives to the monitoring program.

Dr. Crabtree: I guess Alternative 3; I hadn't really thought of setting this up following the MidAtlantic Model because my understanding is there are a lot of problems. I was thinking more around the HMS example, the way they're doing it, and more of we would issue an exempted fishing permit and vessels, but I hadn't really intended to get into sale of the set-aside quota and all of that kind of stuff.

I don't pretend to understand the deals of it, but in my discussions with people, they just had a lot of issues and problems with that. My preference, Rick, rather than a research set-aside program would be to take a look at that HMS Experimental Shark Fishery that they're doing and kind of model it along those lines. I think they allow ten boats to fish in that fishery, and I think it's a lot simpler and more straightforward.

Mr. Currin: That makes more sent to me as well, Roy. Susan and then Brian.

Ms. Shipman: Actually, I was thinking along the same lines as Roy. I thought we were going I guess tailor it along experimental fishing permits. I think that would be a lot cleaner and an easier way to go.

Dr. Cheuvront: On this Alternative 3, here in the actual wording of the alternative we say headboat operators, but elsewhere we also say for-hire sector. There has been some discussion, briefly, earlier this week that perhaps - like I know at least out of Georgia there are a couple of charterboat fishermen as well that are going after red snapper, and they don't necessarily fish the same way.

It might be valuable in terms of the type of data to just make it a for-hire and let anybody who is in the for-hire, whether they're charter or headboat, apply to get into this with the idea that you might get more diversity in the types of areas that you're covering. I think the charterboat fishermen certainly don't fish the same way as the headboat guys do; and if there is more variability in the fish that are out there, the charterboat guys might actually capture some of that.

Mr. Swatzel: Well, to that point, particularly in Georgia, I think there may be one headboat in Georgia, period. Most all of those vessels are six-passenger charterboats so you definitely need to include those.

Mr. Munden: Mr. Chairman, just very briefly I'd like to share a little bit of information concerning a research set-aside. Most of the Mid-Atlantic Fisheries Management Council plans and several of the New England Council plans allow for the councils to set aside up to 3 percent of the quota for research. This concept originally came from industry whereby they could go out and catch a quantity of product, sell it, and use that money for funding research.

Initially that was the approach that the Mid-Atlantic Council took. Then we were advised by the legal folks that those fish were actually public property and had to be treated just like public funds, so the research set-asides then became grants or something very similar to grants. For an individual to receive research set-aside from the quota, they have to submit proposals.

These proposals are reviewed. They are required to submit reports. We are operating on an annual basis now, which oftentimes is very problematic. By the time that the proposals are approved, oftentimes it's too late to take advantage of the fish that may be in the area during the peak of the migration or whatever.

We also found that very few members of industry had the background to put together a proposal that would pass muster so they teamed up with members of the academic community. It's a very good program if you get the right people involved in it, but there are a lot of problems with that.

Mr. Currin: Thanks, Red, I think you just convinced us that's not the way we want to go. Rita.
Ms. Merritt: Just a question, and maybe you know Tom, do charterboats currently have any requirements regarding logbook reporting of any kind?

Mr. Swatzel: I don't think they do on the federal level. I think most states require them to file reports, but I don't think on a federal level that's been required yet.

Mr. Currin: Keep in mind originally when we brought this up it was an attempt to try to maintain that headboat index and utilize the headboats to help maintain that. Erik's most recent analysis indicates that the amount of reduction in the headboat effort in that area that we could allow and still maintain the headboat index is very little, so we would have to maintain that effort at a very, very high level.

That doesn't seem to be feasible under the current ACLs and the like, so I think what I'm hearing is that for-hire should be utilized as part of that program instead of restricting that to headboats. That would include the headboats, but not exclusively.

Dr. Cheuvront: Does that need a motion, Mac?

Mr. Currin: Do you guys need a motion? I mean, we're kind of modifying an alternative there that exists so if you guys want a motion we'll get you one.

Mr. DeVictor: No, I think we have it.
Mr. Currin: If you feel uncomfortable at any point, let me know. John.
Mr. Wallace: If we're going to be looking at this in the headboat sector, can we look at some form of a monitoring program that includes the commercial sector? You're talking about a 3 percent in there so at least analyze it to give these guys some - in appearance that we're trying to include the commercial, anyway.

Dr. Crabtree: One of the problems with this is everybody is going to want part of it, but remember what we were trying to do is maintain the headboat index. Now, there are lots of avenues for commercial vessels or anyone else to get involved in research programs. There is the Cooperative Research Program and they can do that and then they can apply for an exempted fishing permit to do it.

This had a very specific purpose which was to maintain the headboat index. Based on what I've seen and heard it does not sound to me like that we're going to be able to do that. But I think if we start trying to include everybody in here it's just going to be can of worms, and so I think we need to keep really focused on what we were trying to do with the headboat index.

And if we can't do that, then we can't do that, but if other fishermen want to become involved in research, I encourage them to talk to the folks at the Science Center and put in an application for the Cooperative Research Program.

Mr. Wallace: And to that, I was just basing that on what Red was saying with the 3 percent dedicated to research. At that point it could go to other entities. The commercial guys would probably have a wider range of fishing grounds than the average headboat would. You would probably get more diverse data out of it.

Mr. Currin: All right, anything else on this action?
Mr. DeVictor: Is there any discussion of Alternative 2 which would establish a fisheryindependent monitoring program? There's currently one in place. We could reword this alternative to augment the current MARMAP Survey. I know this is happening already. MARMAP is already working on how to expand it. They did get additional SEAMAP funds. The question is do you want this to remain an alternative in the document. Again, the team has added some language to Section 4.18, which is the monitoring section.

Mr. Currin: What we're hoping to do is expand that MARMAP Program. Now it's undergoing some expansion right now, so it's kind of a hybrid. It is not really Alternative 2 and it's not really Alternative 1, which is just utilize it as it exists now. I think we need some separate alternative to indicate that there is a need and desire to enhance existing monitoring programs. That's my thought. Susan.

Ms. Shipman: Yes, that's the word I was going to suggest is maybe just modify this to say "enhance the fishery-independent monitoring program". It's not necessarily only tracking the, quote, progress; it's the recovery is what we're trying to track.

Mr. Geiger: I agree with that. I guess the other thing is that comes to mind is the funding issue associated with this. Perhaps we have an opportunity from the council to send a letter to Dr. Lubchenco explaining the problems and the box that we're in and the requirement that we have to develop and expand this program. Perhaps we could get the council chairman to write a letter on behalf of the council expressing that desire to see if it can be funded or expanded funding to accommodate the program.

Mr. Currin: Yes, I think once we select that alternative as our preferred or it’s approved - I don't know the appropriate timing on that, but I think we need to be sensitive to that. Robert.

Mr. Boyles: Mr. Chairman, just for a point of reference, the current MARMAP budget right now, the line item in the NOAA budget is $\$ 839,000$. That's down from a high of about $\$ 1.25$ million from several years ago. As was discussed earlier, there is some add-ons that's coming through the SEAMAP Program. Again, I just offer that as a point of reference for the committee.

Dr. Crabtree: Well, I think if you're going to write a letter, I know the Center has done some work on developing a plan, and it seems to me you'd be better served if you took a look at what folks have come up in an amendment and actually came up with some dollar values as to what to you're going to think it - you know, and put a little bit of specificity in it. I would phrase it this is a heads up of something that we're working on in our program and it's going to require some additional funding and all, but that we need it in order to continue to move forward towards our commitments on ACLs and those kinds of things.

Mr. Currin: Very good suggestion; yes, we would beef that up with some numbers and express them as the minimum needed to try to address these requirements. At some point in the future that will occur, we hope. All right, what else, Rick.

Mr. DeVictor: That's it for that.
Mr. Currin: That's it for that action.
Mr. DeVictor: Okay, two more actions in the amendment. The next one deals with setting ACLs, possibly ACTs and AMs for the rest of the species. This is Page 263 PDF. Okay, black grouper, black sea bass, gag, red grouper and vermilion snapper are all undergoing overfishing. The first part is we state what is in place currently with the ACLs, AMs and ACTs, and you can tell that there are some holes where there are no recreational AMs, for example, for black grouper, black sea bass and these species. Then we have the table there of the current ACLs.

Okay, Alternative 2 would establish commercial and recreational ACLs. What we're dealing with there is black grouper and red grouper. As you recall, there is an assessment coming up that is starting later this month. The review workshop is late January for red and black grouper. Alternative 2 would set those based on recent catch for those two species.

Alternative 2B, which is the council's current preferred alternative, is to set one single ACL and that would be for gag, black grouper, and red grouper. When that total one is met, you would implement a prohibition on harvest of these three species. The team has raised some concerns and so has staff where you could be allowing overfishing to occur on one of these species; for example, gag, because the current ACL as listed on the previous page where it's around 300,000 pounds.

I have put wording together that we could possibly go down this path of setting two separate ACLs. The current one you have in place for gag, we have a commercial ACL and when that is met, you prohibit harvest of shallow water grouper species. That's not in place, but that's through Amendment 16, which was approved by the Secretary. Then this alternative could also have a separate one which would be these three species and set it up this way. Whichever one is met first, then you could close down the fishery, so that's just one option and I could put the wording up on there.

Moving ahead, ACT alternatives, again, ACT could be a type of AM, and so we have ACT alternatives for your consideration in the document. This would just be one more way to avoid exceeding the ACL. Next we have AM alternatives. We currently do not have recreational AMs for these species.

The team's concern on this - and you do have a preferred - was that you do acknowledge using the three-year running average, but there is no component for an actual AM on what you do if you exceed the recreational ACL what if you're about to exceed it. You may want to consider choosing a preferred alternative under Alternative 5. There are two of them, 5A and 5B.

5A is set up like snowy grouper is and golden fish where the RA could shorten the following year by the amount required to ensure landings do not exceed the Sector ACL. 5B separates that out and if the specie is overfished and the Sector ACL is projected to be met, prohibit the harvest. Then if it is exceeded the RA shall publish a notice to reduce the Sector ACL, so that's
sort of handling what if you go over? Well, you decrease your ACL the following year. Those are your ACL, ACT and AM alternatives.

Mr. Currin: Why don't we head back up to the top and run back through these and select preferreds where we can and modify where they need to be based on staff suggestions. Roy.

Dr. Crabtree: I would like to see before we choose a preferred, though, an additional alternative that Rick was talking about because I have that same issue with it. There it is up on the board, and I've seen this language. I would like to move this be added to the document.

My motion is add the following: Alternative 2C, retain the current commercial ACL for gag of 353,940 pounds gutted weight and the commercial AM to prohibit commercial harvest of shallow water groupers when met; retain the current recreational ACL of gag, 340,060 pounds gutted weight; in addition, establish an ACL for gag, black grouper and red grouper of 662,403 pounds gutted weight commercial and 648,663 pounds gutted weight recreational. These values are equivalent to the expected catch resulting from the implementation of management measures for red grouper and black grouper in Amendment 16 and the gag ACL specified in Amendment 16; prohibit the commercial possession of shallow water groupers when either the gag or the gag, black grouper or red grouper ACL is met.

Mr. Currin: Motion by Dr. Crabtree; second by Brian. Discussion of this motion? Brian.
Dr. Cheuvront: Except for the very last little bit, I think this really kind of addresses some of the issues that we've had in North Carolina where we can see a closure in the red grouper fishery simply because of the gag quota being taken. I'm not sure how this is going to play out, but I think this is a better alternative than the one that we currently have. Actually I would like to see the prohibit commercial possession when any of the gag or the gag, black or red groupers ACL is met, but this is better than what we had.

Dr. Crabtree: Rick, this is similar to our current preferred; it just seems more specific and more clear; am I correct?

Mr. DeVictor: Your current preferred only has half of this component where it has the 600,000 pounds. It also depends upon, in your current preferred, what happens to the existing gag one. As the current preferred is written, I assume that would replace the existing gag one.

Dr. Crabtree: Because I read the current preferred and it does reference the gag quota, so I'm assuming the gag quota would still be there, but I think it's just a more clear and specific way to state the current preferred alternative. Rick, what we're really doing, are we basically replacing the language in 2B with this more specific language?

Mr. DeVictor: That was my intention.
Dr. Crabtree: So this is just replacing the language in our current preferred with more explicit and clear language.

Dr. DeVictor: And perhaps that last "or", change that to "and".
Mr. Currin: That should make Brian more happy.
Dr. Cheuvront: Yes, it does.
Mr. Currin: And many others as well. Further discussion on that motion? Is there any objection to that motion? I see none so that motion is approved. Thank you, Rick, and all involved in crafting that. Now there was an issue with our Preferred Alternative 4 under the ACLs, right, that we needed to address?

Mr. DeVictor: The AM; your current preferred alternation for AM would be to use a three-year running average for that. However, you do not specify - well, is your AM an overage to shorten the following season? That is addressed under Alternative 5; and as I mentioned Alternative 5A would track this approach to snowy grouper and golden tilefish.

Mr. Currin: Does everybody understand what we need here? We need a way to implement our accountability measure. We've got a way to determine it, but we haven't decided what we're going to do. Susan.

Ms. Shipman: Rick, did you say 5A is the way we do - I thought 5B was how we were doing that for overfished species because it would seem to me in order to comply with the Act we would need to go with 5B. I don't know that we can - if we project we're going to go over it, I don't know how we can allow it to continue to go on. It seems like it needs to close and then if we've got overage deducted off of the next year, that would be my preferred, and I would move that be our preferred.

## Mr. Currin: Motion by Susan to select Alternative 5B as our preferred; second by Brian.

 Roy.Dr. Crabtree: Yes, and as much as I dislike in-season adjustments in using MRFSS in recreational fisheries, the trouble with 5A is you could get in a situation where you're in June and you know you're already over and if you don't do something you could end up so far over that there is absolutely no fishery the next year, so it could really get you in a deep hole if you just went with 5A.

Mr. Currin: Further discussion on the motion? Is there any object to the motion? I see none; that motion is approved in selecting 5B as the preferred. All right, Rick.

Mr. DeVictor: Okay, this is the last action in the amendment, and it has to do with modifying the TAC Framework. We went over this at the last meeting, but I'll run through it. There is a current framework procedure in place, and that is outlined in an appendix to the document. This approach would update the framework procedures to incorporate the language of ACLs, ACTs and AMs.

I think it's very similar to the approach that the Gulf is using, but I'll go through the steps fairly quickly. It indeed is a series of steps that would occur and what would be done. This is outlined under the "Procedure for Specification of ACL, and that's on Page 276 PDF. The first step just outlines that you receive an assessment. I noticed that language is very specific to SEDAR, and we may want to augment that and you could possibly get an assessment outside of SEDAR.

Step 2 is the SEDAR provides the OFL/ABC range, range of rebuilding period and perhaps the MFMT and MFST. Then after that the SSC reviews the SEDAR Report and sets the ABC, so that's currently how it functions now. But here Step 4 is the council would have a public hearing on the ABC and the range of ABC and bring that out to the public.

Then Step 5 the council chooses an ACL, ACT and AM. Then Step 6 the council sends to the RA the OFL that came out of the SEDAR assessment, the ABC from the SSC recommendation, and council's recommendation of an ACL, ACT, AM. Then Step 7 the RA reviews this; and if he or she concurs, forward within 90 days of receipt a notice of a proposed rule.

Finally, Step 10 if NMFS does not agree with this new ACL or management measures or whatever you change through framework, he or she must notify the council within 30 days along with the reasons and recommended changes. What could be changed under this framework is outline under eight.

That's on PDF Page 278 and it outlines bag limits, size limits, vessel trip limits, closed seasons or spatial area, gear restrictions and quotas designed to achieve the oy and keep harvest levels from exceeding the ACL and sector ACL. So, again, the approach here is the council could move with several options a full amendment; you can move ahead with an emergency rule or interim rule.

This is the third category where it's moving forward with a regulation amendment. It's to get something in place a lot sooner. As we rebuild these stocks, perhaps, you can increase the TAC, you maybe could adjust the size of the closures or what have you without going through a full amendment.

Mr. Currin: Comments? It makes sense to me to have as much flexibility as we can in our framework to allow us to act as quickly as we can and as broadly as we can. Anything anybody sees that is missing that should be included that's not listed? Susan.

Ms. Shipman: I don't think so. I was just trying to think through our issue with any kind of situation we might set up down the road through a lottery or whatever. I know we were planning to do that maybe in another amendment. I'm just wondering is there a way to provide for something like that in here.

Mr. Currin: It's a good thought because it looks like that may be coming down the road. I guess we could modify the framework in the same amendment that we establish that lottery setup. I guess it could be done then, and it may be more efficient to do it then. If I had to guess right now I'd probably guess wrong as to what we needed, but I don't know. I may get lucky. If you want a shot at it we can certainly try to do it, if you think it's worth doing.

Mr. DeVictor: Are you talking about adding to the list of the bag limit and the size limit the establishment of a lottery program or augmenting an existing lottery program?

Ms. Shipman: Well, I'm not sure. We might have to establish it through the other amendment, but it could be revisions to modifications of a lottery system if and when developed or something like that. I'd hate for us to have to go back and modify or adjust it, tweak or fine tune it through an amendment if we could go ahead and set up the framework. Maybe we're better off just to do it when we set the thing up in a subsequent amendment or whatever. I don't know; it's just a thought.

Mr. Currin: Well, we can think about that further and change these in the future, I presume. Everybody is okay with where we are? Rita.

Ms. Merritt: Well, is that something that we might want to put in here as just an alternative as a possibility, just saying that - you know, throw it out there for public comment or is that more appropriate at another point?

Mr. Currin: Well, if you're talking about establishing a lottery system, yes, I think it would be more appropriate to do it somewhere else. All right, any desire to select Alternative 2, I believe it is, as a preferred to update our framework? Brian.

Dr. Cheuvront: Yes, I'll go ahead and make a motion here that we adopt Alternative 2 to update the framework procedure for the Snapper Grouper Fishery Management Plan to incorporate ACLs, ACTs and AMs. Such modifications would be based upon new scientific information indicating such modifications are prudent and make that our preferred alternative.

Mr. Currin: Okay, a motion by Brian and a second by David. Further discussion on the motion? Is there any objection to that motion? I see none. All right, that's it for the actions in Amendment 17. There are some issues I think regarding 17 and how it's moved forward from here that need to be discussed as well. Susan.

Ms. Shipman: I was just wondering, we've got these specifications with regard to the SSC examining SEDAR Reports and this, that and the other, but yet under SEDAR we are also providing for external bodies to be doing the stock assessments; perhaps the Florida Fish and Wildlife Commission, it could be ASMFC. Do we need to just tweak that language to make sure we accommodate allowing the SSC to review those stock assessment by other external bodies that have been, quote, sanctioned by the SEDAR Steering Committee and make sure we get those folded in, too. It's just kind of a housekeeping thing.

Mr. DeVictor: Yes, I think that should be done and I think that would be under Number 1. I could add the non-SEDAR assessment type. I'll add that.

Mr. Currin: I assume everybody is okay with that. Good point, Susan, thank you. Roy.

Dr. Crabtree: Yes, because we just went through a situation in the Gulf where you're probably all aware we have an issue with turtle takes in the longline fishery. Our framework allows us to move the gear boundaries through a framework action, and I had originally come in thinking we could do a regulatory amendment and do a framework action, but our framework is specific about it has to come from the stock assessment or in SEDAR and things.

It didn't allow us to do it based on the turtle issue, and so I think we need to build that kind of flexibility in there that it could be a protected resources issue or something like that that we would respond to or biological opinion or something along those lines.

Ms. Smit-Brunello: I had another matter to bring up, but I think it's probably prudent to put some discussion in the document based on recent litigation in New England. That's what we call the mixed stock exception. In the National Standard 1 Guideline, under 50 CFR 600.310 M, I think it is, I would like to read the following.

It says, "Exceptions to Requirement to Prevent Overfishing. Exceptions to the requirement to prevent overfishing could apply under certain limited circumstances. Harvesting one stock at its optimum level may result in overfishing of another stock when the two stocks tend to be caught together. This can occur when the two stocks are part of the same fishery or if one is bycatch and the other is fishery.
"Before a council may decide to allow this type of overfishing, an analysis must be performed and the analysis must contain a justification in terms of overall benefits, including a comparison of benefits under alternative management measures and an analysis of the risk of any stock or stock complex falling below its MSST. The council may decide to allow this type of overfishing if the fishery is not overfished and the analysis demonstrates that all of the following conditions are satisfied."

Then it lists three conditions which the council has to look at and I'll paraphrase; "that the action will result in long-term net benefits to the nation; that mitigating measures have been considered; and it's demonstrated that a similar level of long-term net benefits cannot be achieved by modifying fleet behavior, gear selection configuration or other technical characteristics in a manner such that no overfishing would occur; and that the resulting rate of fishing mortality will not cause any stock or stock complex to fall below its MSST more than 50 percent of the time in the long term; although it's recognized that persistent overfishing is expected to cause the affect stock to fall below its Bmsy more than 50 percent of the time in the long term."

This mixed-stock exception, as it's fondly referred to or not fondly referred to, is not really applicable in this particular circumstance with red snapper because, as I read, the council may decide to allow this if the fishery is not overfished. Since red snapper is overfished, that situation is not present before us. However, given some litigation that has gone on in New England and one of the claims that was made against the Fisheries Service was that the council never considered this exception, so I think it's worth giving some initial write-up of it and some analysis and just put it into the document.

I'm not suggesting that necessarily it's an alternative because, as I said, red snapper is overfished and overfishing is occurring, but I think we could address it somewhere in the document. Whether you want to put it in a considered but rejected appendix or something of that nature, I don't know. If you gave me leeway to work with staff to figure out a good place to address it and then bring it back before you at your next meeting to take a look at it.

Mr. Currin: Thank you, Monica. All right, here is Amendment 17 before with the ACLs for a number of species and all the red snapper issues as well. Is this the way we want to leave this?

Dr. Crabtree: No, I'd like to make some changes. I think given the complexities of the analysis required for red snapper and magnitude of the changes we're looking at, that it would be a good idea to split Amendment 17 into two amendments and to take the ACLs and other provisions for most of the stocks in the amendment and put them in what I guess would be 17A or B and then deal with red snapper as a separate amendment.

I think that the other species in this document can be finished up and don't require all that much additional analysis. Of course, we've got timelines for all of these things and they're going to be a challenge to make, but I think that we potentially could have a situation where the ACLs on all these other species are held up waiting for us to complete our work on red snapper and that by splitting these two out - and I'm not suggesting either one is going to be delayed.

I think we need to try and multi-task here and work on both of these, but I think there is a good chance that the other parts of this document could be finished more quickly. I also think that there is at least a reasonable chance that we could come to a finding of no significant impact on the measures affecting these other stocks because many of them have already been put in place and already have been looked at through an environment impact statement. That would also help that move through the system more quickly. I would offer that suggestion as a way to move forward.

## Mr. Currin: Discussion regarding Roy’s suggestion? Susan.

Ms. Shipman: I think it's a good one, and in a sense we sort of ended up doing that I guess with 15 A , B or C - I can't even remember - when we finally got to a point we bifurcated amendments and we had things tracking along parallel tracks. Provided it doesn't cause undo workload on our staff, and I'd certainly want to hear from them, I think it's a good suggestion.

Mr. DeVictor: Just to clarify, one would not have priority over the second; would they both have the same level of priority?

Dr. Crabtree: Well, I would think the timing would be dependent upon when the analyses are completed and those kinds of things, but both of them I think we need to move forward with as quickly as we can.

Mr. Geiger: Yes, predicated upon Roy's comments that we need to move forward quickly on both of them, I would support it as well.

Ms. Shipman: So which is going to be which because I know the public follows these as do our staffs? I assume red snapper is going to be 17A and the other is going to be 17B.

Dr. Crabtree: I'd say red snapper be A and the rest of it would be B. That was suggested by Ms. Hogan and it sounded good to me.

Mr. Currin: Perhaps a motion to this effect would be in order to make this suggestion to the council. David.

Mr. Cupka: Mr. Chairman, I would move that we split Amendment 17 into two amendments to be known as Amendment 17A to deal with the red snapper issues and Amendment 17B to deal with the remainder of current 17.

Mr. Currin: Second by Susan. Further discussion about the amendment formerly known as 17 ? It is becoming a recurring theme. Is there any objection to this motion? I see none; that motion is approved. Seventeen is literally done and we embark on two parallel paths again. What is next on our agenda is the expansion of the fisheries management unit, and I think we kind of have addressed that to a large degree.

It's currently in Amendment18. There was some consideration of moving it into 17 and move it forward in conjunction with the ACLs for snowy grouper and tilefish, but I think the consensus of the committee earlier was to leave that in 18 and deal with it there. Unless there is some objection to that, we will consider that agenda item dealt with and move on to Amendment 18. Kate is going to come up and do that.

Mr. Munden: Mr. Chairman, while we're getting set up for discussions on Amendment 18 I would like to just share a little bit of information with the committee relative to moving the boundary north into the Mid-Atlantic area of jurisdiction. Jack Travelstead asked me to pass on to you the fact that some of the snapper grouper species that have been collected off Virginia have been aged in cooperation with the NMFS Beaufort Lab, and they have that information available.

One of the things that Jack just briefly touched on is if indeed it is the decision by the South Atlantic Council to create a northern management area, then we would propose that there be a committee set up populated primarily by members of the Mid-Atlantic Council but with South Atlantic representation. After Jack mentioned that, I said, well, we should probably also send an invitation to the New England folks.

What I will pass on to my chairman, Rick Robins, is that maybe we should consider a six-person committee with two South Atlantic and four Mid-Atlantic or an eight-person committee with two South Atlantic, four Mid-Atlantic and two New England, and, of course, he would work with the New England folks to see if indeed they are interested in serving on that committee. That committee would recommend to the South Atlantic action that would occur in the northern management area should one be established. Thank you, Mr. Chairman, for that opportunity to speak.

Mr. Currin: Thank you, Red, and Jack mentioned some of that to me. I think it's a good idea to set that committee up that way; and whether the South Atlantic gets representation on that particular committee or not, I think we can discuss whether that's advantageous or not or we'll just let the Mid-Atlantic and New England councils form that committee and then provide advice to the South Atlantic down here. We're certainly willing to cooperate with you in whatever seems to work out best.

Dr. Crabtree: One thought I had about this, because there is this issue of counting fish against ACLs and all that. With the data that is being collected in Virginia and we're going to get some catches up there and other information, I think we have an updated snowy grouper assessment scheduled for next year, I believe, I think it would be a good idea that before this goes into effect we ought to update that assessment and pull in the data from up in that area and then re-estimate things and re-estimate the allowable catches and all that so we make sure what they have is factored into all of that and see what kind of change it makes.

Probably the timing may work out, but I think we ought to ensure that before we extend this jurisdiction to make that happen we have all that information and all that incorporated into the assessment and the ACLs.

Mr. Harris: One thing else with respect to the northern management unit, we'll need an advisory panel that would be comprised of Mid-Atlantic folks that you would actually be responsible for paying for their travel and setting up those meetings and all that; and, too, with the New England Council, the same thing, you may want to have AP members from that council as well.

I know that there is one man in Virginia Beach that's very interested in being on every AP related to snapper grouper he could be on right now. We'll pass that along. I'm not sure but I think the South Atlantic Council might have to appoint the committee that's comprised of not the AP but the committee members themselves, and we'd obviously take your suggestions on who should be on that committee. I think since this is under the South Atlantic Council we have to appoint the committee.

Mr. Cupka: I know we're going to get into more discussion on this later on, but the first thing it seems to me in regard to the AP it wouldn't be critical for us to have representation on that, but I think it would be good to have a minority representation on the committee so if questions come up about possible impacts on other things, that our people could maybe provide some insight to the committee on that. I would think it would be good to have at least some South Atlantic representation on the committee but not on the AP.

Mr. Currin: Thank you, David, and I'm sure that will all be worked out the way it needs to be and will function best as we get closer. Okay, Kate, are you already; Amendment 18.

Ms. Quigley: Okay, this is Attachment 18 in the Snapper Grouper File. Chapter 2, description of alternatives, begins on Page 41 of your PDF document. The first action is extends Snapper Grouper FMU north. You see that up on the screen.

There are three alternatives; Alternative 1 being the no action alternative, of course; Alternative 2, extend the management boundary for all species in the Snapper Grouper FMU northward to include the Mid-Atlantic Council's jurisdiction, except for black sea bass, golden tilefish and scup; and Alternative 3 being extend the management boundaries for all species in Snapper Grouper FMU northward to the Mid-Atlantic and New England Councils jurisdiction; again, except for black sea bass, golden tilefish and scup.

Mr. Currin: If I heard Roy correctly, he made the suggestion I think that we delay this action until after we received the next snowy grouper assessment. Did I hear you say that or not?

Dr. Crabtree: Yes, and I don't think that means you need to delay this amendment or take it out or anything. I think we just need to make it clear in here that it would go into effect after the assessment is done and after those new things have been re-estimated. Otherwise, I suppose another alternative you could do is assuming that we're going to have to come in and amend the snowy grouper management when we get the assessment, I suppose you could decide to pull it out of this and do it when that time comes.

That's up to you, but I just think there are issues with pulling their catches into the ACL when those catches weren't factored into the assessment. I just think we're going to hear a lot of issues about that.

Mr. Currin: I agree. David.
Mr. Cupka: And also it would be good to hear what the New England Council's thinking is on whether they want to get involved or not.

Mr. Currin: Yes, Duane whispered in my ear that he thinks they want to be involved, and I suspect that they do. All right, so is everybody content to move ahead with this and then perhaps consideration of an implementation date based on the results from the next snowy grouper assessment? Okay, I'm seeing heads nod in the affirmative.

Ms. Quigley: Okay, the next action is on Page 43 of the PDF Document, and it regards limit participation in the golden tilefish fishery; with Alternative 2 being limit participation in effort in the golden tilefish fishery through the implementation of an LAP Program.

Alternative 3 is distribute golden tilefish gear-specific endorsement for snapper grouper permit holders that qualify under the eligibility requirements stated below. Only snapper grouper permit holders with a golden tilefish longline endorsement or a golden tilefish hook-and-line endorsement associated with their snapper grouper permit will be allowed to target golden tilefish, and it goes on to give details with logbooks being used to check catch history and trip tickets to verify.

Commercial quota would be allocated as 10 percent of those holding golden tilefish hook and line; 90 percent to those holding longline endorsements. Then there are eligibility requirements below that. Basically the eligibility requirements are 1,000 pounds, using the best three of five years from ' 01 to ' 05 ; or 500 pounds with the best three of five years from ' 01 to ' 05 .

There are three subalternatives in all. Two refer to the hook-and-line endorsement eligibility, so that's 500 to 1,000 pounds, and then the longline eligibility requirements being 2,000 pounds caught between January 2005 and November 2007.

Mr. Currin: Questions or comments? There was some discussion of how to deal with - we've got a number of LAPP issues before us. The LAPP Committee talked about that some and talked about it some in the Executive/Finance, and all of that was going to be decided in Snapper Grouper, so here we are and we've got it. We can either pass the buck to the full council, which is sitting around the table, or do it now. Roy.

Dr. Crabtree: Well, one observation I'd offer up is my experience with the Red Snapper LAP Program as it ended up with - I can't remember how many actions, Phil, but ten or so actions in it with multiple alternatives in all of them, and it ended up a very substantial document. That's one thing.

Then when I'm looking at the endorsements here, I really think we need to kind of expand the qualifier ranges on them, because I see that we just have a single alternative for a golden tilefish endorsement with 2,000 pounds and only from 2005 through 2007. I am sure there are several other reasonable alternatives. I don't think we need to get into those, but I think we could ask staff to expand those somewhat.

And, Kate, this later has the Wreckfish IFQ in it as well, so my guess is if we're going to go down the path of some sort of catch-share program in golden tile and some sort in wreckfish, those are going to end up being split out into their own separate amendments because it is a lot of details and a lot of things involved in setting up a LAP Program.

Mr. Currin: Other suggestions about the current alternatives in the golden tile? Roy suggested that we increase the range of alternatives for the longline endorsement from one level of landings to some range. Any other suggestions? Kate, are you looking for any preferred alternatives at this stage of the game regarding Amendment 18?

Ms. Quigley: Not with this particular action item. We haven't done enough analysis for this particular action item. We have for endorsement but, as Roy suggested, expands the eligibility requirements for a LAPP, we have not done any analysis at all. We haven't fleshed out the details with regard to that yet.

Mr. Currin: Any other questions or comments about golden tile issues in 18? Okay.
Ms. Quigley: Okay, the next action is modifications to management of the black sea bass pot fishery. There are a number of different alternatives. They differ in the number of pot tags allowed annually per vessel. Each of them reads pretty much the same; require that each black sea bass pot in the water or at sea on a vessel in the South Atlantic EEZ have an attached valid identification tag issued by NMFS; limit the black sea bass pot tags annually to 100 per vessel or per permit. This means per permit and not permit holder. There was some question among the IPT members.

NMFS will issue new identification tags each fishing year that will replace the tags from the previous fishing year. Alternative 2 specifies 100 per vessel; Alternative 3, 50 per vessel; Alternative 4, 25 per vessel. Alternative 5 it becomes 100 per vessel in Year 1; 50 in Year 2; 25 in Year 3 and onwards until modified. Then Alternative 6 is practically the same thing, but it doesn't specify 25 in Year 3. It just says onwards until modified after specifying 100 in Year 1 and 50 in Year 2.

Then there is Alternative 7 which is not a restriction on the number of pot tags. Instead it has to do with trying to help prevent discards. Black sea bass pots must be brought back to shore at the conclusion of each trip with Subalternative 7A being allow fishermen to leave pots in the water for no more than 72 hours.

Mr. Currin: Comments or questions for Kate on the black sea bass pot management issue?
Mr. Cupka: Kate, did you have an opportunity to look up some whale regulations to see how that might fit in with this because there are some requirements relative to pots being left out at certain times of the year and all?

Ms. Quigley: Are you referring to how long they can be kept in the water under other regulations?

Mr. Cupka: Well, at certain times of the year they're not allowed to leave them out. They have to bring them back in at the conclusion of a trip.

Mr. Quigley: I don't have details on that. I'm wondering if Gregg might know. I'm not sure but I can check.

Mr. Currin: Yes, and I'm not familiar with those.

Mr. Geiger: Kate, you're right about the rationale for bringing them back to shore each trip, but in addition to that the discussion was that it was also a de facto limit on the number of traps that they could haul. If you had to bring them back to shore, it was also a limiting factor as to how many you could take to sea and have deployed.

Mr. Currin: Yes, when we first talked about this we were talking about the time and the number of pots and the size of the boat and all that so that couldn't haul them back, but that's plowing old ground. Rita.

Ms. Merritt: Kate, under the Alternative 7A, Table 2.23, is there a backup to that as to how the pluses and minuses are put under the different alternatives here; study of these effects, how much bycatch is being effected, that kind of thing? Isn't there a study that backs that up somewhere? I didn't find it.

Ms. Quigley: It hasn't been fully evaluated. A lot of the staff went towards Amendment 17, and so we haven't fully analyzed all of that information yet.

Ms. Merritt: But will that be in, though, by the time we go to public comment?
Ms. Quigley: Absolutely.
Dr. Cheuvront: I think it's important to get the marine mammal stuff straightened out, because that really is going to affect what we can do and what we can't do here. Also, I have been kind of reluctant to move too much forward on this specific issue when we know that we've got research that is ongoing that is addressing some of the issues that could be related. I mean, some of the people have been concerned about ghost pot fishing and that sort of issue.

I know that Tom Burgess and some other folks are working on research right now to address those issues to give us specific information that could affect how this would work. If there is marine mammal protection legislation that is going to affect whether or not the fishermen can leave their pots out, that does really affect things like how many pots can a fisherman actually fish.

I would like to ask that we get all those issues clarified and come back to us and explain that because that would really help us to tighten these potential alternatives and how we could handle this. I've always been a proponent, as you know, of let the fishermen fish the way they want to run their business as long as it's not having a detrimental effect, but if other federal legislation or something has impacted this we need to know and that could just prove everything moot at that point.

Mr. Currin: Well, I guess we can approach that two different ways, Brian. Perhaps, if everyone is comfortable, we can direct staff to look into the implications of Large Whale Reduction Team results and recommendations or guideline or rules of whatever that have been developed and modify the existing alternatives as per rather than wait and then come back and come and do the same thing later.

## Dr. Cheuvront: I would support that, Mac.

Ms. Quigley: Pertinent to that, I believe we can go ahead and look into all the different regulations. I believe it was fishermen could not leave pots in the water for more than one month I believe was the requirement. It was much longer than we expected it to be, and so the 72 hours is, of course, quite a short period of time compared to that, but I will check again on that.

Mr. Currin: Red, you may know the answers to all this.
Mr. Munden: Mr. Chairman, I serve on the Atlantic Large Whale Take Reduction Team, and I'm not aware of any soak time restrictions for the South Atlantic Area of Jurisdiction. The team met in April of this year, and the focus currently is on reducing the number of vertical lines. My question for Kate, is there anything in these proposals here that would prevent more than one pot being set per buoy line? Is there anything that requires one pot for each buoy or one buoy for each pot?

Ms. Quigley: I don't think so; I haven't seen anything.

Mr. Munden: One of the things that the Atlantic Large Whale Take Reduction Team is proposing that they set multiple pots per buoy line. Once you move out of the southeast region, they no longer call these things pots on a string. They refer to them as trawls. Well, down here we refer to shrimp trawls and otter trawls. It's a completely different type of gear, but that is what they are recommending, that they put multiple pots per buoy line to reduce the number of vertical lines in the water. There may be something about soak time, but it just doesn't ring a bell with me.

Dr. Cheuvront: I know that having talked with some of these guys in North Carolina fishing these black sea bass pots, there are quite a few of them especially in the southern part of the range, in North Carolina who are fishing multiple pots per vertical line, but typically it's two pots per vertical line. I think they're saying it's because it's too unwieldy to fish more than two pots. But, yes, that might be a way that we could count vertical lines as opposed to pots or something like that if that's what we need to go to.

Mr. Cupka: I do know that the classification under the Marine Mammals Act that black sea bass pots recently were reclassified as a Type II I believe fishery; and just what the implications of all that are, I don't know, but it's something that we need to look into.

Mr. Currin: Yes, I know when they were talking them a while back that they were considering or asking for sinking lines connecting the various traps under water; and because of the nature of the black sea bass fishery and they are fishing around live bottom oftentimes, as those things moved or were pulled, then there was some concern among the fishermen that the gear would get hung in the coral and the rocks and all of that and not only destroy habitat but potentially lose gear.

They were arguing that their floating lines did a better job of allowing them to retrieve their gear. Okay, are we okay, then, with these alternatives on the black sea bass pot limitations with the directions to staff to look into any implications of Atlantic Large Whale Issues and modify those alternatives as appropriation. Do we want to give direction to create others that might seem reasonable as a result of that? I'm not sure there is going to be any. Brian.

Dr. Cheuvront: And just to make sure that I understand, these would probably come back to the council at the September meeting? Okay, I'm asking because I want to let some of these guys know, since that meeting is to be in Charleston, it’s not that far from those guys, especially in that southern range of North Carolina, who may want to come to the meeting.

Mr. Currin: Okay, anything else on black sea bass pots?
Ms. Quigley: Okay, the next action is separate snowy grouper commercial quota into regions or states; Alternative 2 being to separate the snowy grouper commercial quota into regions; and Alternative 3, separate the snowy grouper commercial quota by state.

Mr. Currin: We did receive some comments regarding this at the public comment period the other night, some support for consideration of these. Everybody okay with these three alternatives as they exist here? All right, the next one is gag, I think, Page 48.

Ms. Quigley: Page 48, separate gag recreational allocation into regions or states; again, Alternative 2 being to separate the recreational allocation into regions; Alternative 3 being to separate the recreational allocation into states.

Mr. Currin: Everybody okay with these? Roy.
Dr. Crabtree: The comparison starts out saying Alternative 1 would allow the current seasonal advantage for Georgia and Florida fishermen to persist, but given Amendment 16 is reasonably foreseeable in January, February, March and April is closed, it's not clear to me there is any seasonal advantage. By the time gag opens in May I would think they're pretty much available can't you catch gag in May up off North Carolina?

Dr. Cheuvront: The big part of the season comes later.
Dr. Crabtree: Well, at any rate I think we ought to make sure this doesn't reflect pre Amendment 16 and is post, because it's at least a debatable proposition whether there is any advantage at this point.

Dr. Cheuvront: I think, though, that the analysis perhaps on this has already been done. We've discussed this earlier at a previous meeting. I certainly don't want to take it out at this point. I'd at least like to review that analysis again now that we have Amendment 16.

Mr. Currin: Yes, I think that's all that Roy is asking is to look at the existing data and see if in fact the statement in the comparison is accurate. If it's not, let's make it accurate; if it is, then that's fine. Bonnie.

Dr. Ponwith: Mr. Chairman, I'm not a member of the committee but I did have a comment on the separation of recreational quota into divisions, either by region or state. The same caution on that, and that is that the finer you partition or stratify your samples in the recreational catch estimates, the lower the precision is.

What I would anticipate they would have to do is continue to do those catch estimates regionally and then post-stratify to get the state breakdowns. But, just so you are aware that actually monitoring and managing separate quotas with an expectation that the catch estimates would be done state by state, I don't think that is realistic.

Mr. Boyles: I would just like to echo what Bonnie said; particularly to the degree that the Service may be looking to the state partners to help with that quota monitoring, it would be very, very difficult in South Carolina.

Mr. Currin: All right, other comments? Susan.
Ms. Shipman: Bonnie is exactly correct. The only thing I would add is in our situation we have confidentiality issues already. We're lumped with Northeast Florida to begin with and you split us into a separate state we're just going to be one big blank on the page. It's a difficulty for the data reasons she raises.

Mr. Currin: Yes, this is recreational and I don't think you'll have any confidentiality problems.
Ms. Shipman: No, but we will -
Mr. Currin: With the commercial stuff.
Ms. Shipman: Yes, and even I think with some of the headboat historically we've been lumped with Northeast Florida.

Dr. Crabtree: I know we've passed the snowy grouper commercial breakdown, but you will have that problem there, and we're going to have real problems with trying to implement it because the amount of fish that's caught in Georgia is probably so small it just wouldn't be practical.

From another standpoint I don't know if you need to give staff some guidance, but when you look at these alternatives, they don't really tell you anything; separate recreational allocation into regions, okay, but what are the regions. I suspect staff is going to need some guidance about what is it that you want them to look at.

Mr. Currin: Well, when we talked about it previously we were talking about Georgia and Florida as a region and South Carolina and North Carolina as a region and states being individual states. That's my recollection. Are there other recollections or suggestions as to different regions to consider? I can't envision any, not unless they were very selfishly derived such as North Carolina as one region. Everybody is comfortable with that, then, to lumping Georgia and Florida and South Carolina and North Carolina as a region and then four states? Okay.

Ms. Quigley: Okay, the next action is adjust golden tilefish fishing year. Right now the fishing year goes from January $1^{\text {st }}$ to December $31^{\text {st }}$; so Alternative 2, change the start date of the golden tilefish fishing year from January $1^{\text {st }}$ to September $1^{\text {st }}$; and at the same time remove the 300 pound trip limit when 75 percent of the quota is taken.

Alternative 3, change the start of the golden tilefish fishing year to August $1^{\text {st }}$; again with the subalternative being remove the 300 pound trip limit; Alternative 4, change the start of the fishing year to May ${ }^{\text {st }}$; again removing the 300 pound trip limit; and then Alternative 5, close the longline fishery when the 300 pound trip limit for golden tilefish goes into effect.

Mr. Currin: Everybody okay with these? Okay.
Ms. Quigley: Okay, on Page 51 there is the action for improvements to data reporting. These are commercial data reporting alternatives; Alternative 2, require federally permitted snapper grouper dealers, if selected, to report electronically with NMFS being authorized to require weekly or daily reporting.

Alternative 3, require all permitted snapper grouper dealers to report electronically; and Alternative 4, require all vessels with the federal snapper commercial permit to have an electronic logbook tied to the vessel's GPS; Alternative 5, require vessels with the snapper
grouper commercial permit, if selected, to have a NMFS-approved observer on board while fishing for snapper grouper. Those are all the commercial alternatives and we'll go on to the others in just a minute.

Dr. Crabtree: It seems to me this is pretty much what we did in Amendment 15. I'm looking at the NOA announcement that went out in the 15 book. One of the things we approved or the council approved in Amendment 15 was require a vessel that fishes in the EEZ, if selected by the NOOA Fisheries Service, to carry an observer and install an electronic logbook and/or video monitoring system.

That's out for public comments now. I don't have the amendment in front of me, but I think we need to make sure we're not retreading ground we've already made decisions on. I think we need to take a look at the monitoring requirements in Amendment 15B and make sure we haven't already taken care of this. Do you recall, Gregg? There was a preferred alternative where we addressed a lot of these things in 15B.

Mr. Waugh: Yes, my recollection is the way it has been left in 15B, it's all if selected, if selected, and I think in 18 we're looking at requiring it.

Dr. Crabtree: Well, at least Alternative 2 appears to be if selected, so I guess that's to require electronic reporting. At any rate I'd like to see - and maybe it's in here, Kate, but make sure that it explains status quo as Amendment 15B. I know 15B hasn't been approved yet, but before we get down the road with this, those decisions will have been made. We just need to look at it.

Mr. Currin: There is a note in there on Alternative 4 that says if this particular alternative were changed to if selected, that would mirror 15B. All right, comments or questions? Okay.

Dr. Crabtree: With things like electronic logbooks that are in here, does the document address who is going to pay for these things? I'm assuming the fishermen are going to pay for that.

Ms. Quigley: As of right now the document does not explain that.
Dr. Crabtree: Well, that's something that if we're going to go down this path we would have to make decisions on. At least right now I'm not aware of any money that has been appropriated to pay for these kinds of things.

Mr. Currin: Okay, any other comments? All right.
Ms. Quigley: Page 53 in your PDF Document addresses the for-hire data reporting alternatives. Alternative 2, require all vessels with a federal for-hire permit to report electronically; Alternative 3, require selected vessels with a federal for-hire permit to report electronically; and Alternative 4, require vessels operating with a federal for-hire permit to maintain a logbook for discard characteristics, for example, size and reason for discarding, if selected.

Mr. Currin: Comments about these alternatives? Susan.

Ms. Shipman: Just a question; how will this interface with the enhanced for-hire reporting that might come down through MRIP? Every now and then we run into this where the states are operating a program, NMFS may be operating a program, and you've got an overlay potentially of two to three data collection programs going on with the same people at the same time at the same docks. I'm just wondering how this will interface and whether we know that and whether the MRIP Proposal for for-hire would mirror this so that it will be taken care of or not mirror it or whatever.

Mr. Currin: I don't know. Roy.
Dr. Crabtree: Well, I don't think we do know that yet at this point. Now they are looking at some pilot studies on the for-hire fishery. I think there is going to be one in the Gulf starting fairly soon, and there has been one in Puerto Rico, I think, testing electronic logbooks in the forhire sector.

There is a lot of work going on in that direction, but the issue is trying to figure out how you're going to verify that things are being reported accurately. That's what they're working on. From my perspective this is something that has got to be carefully coordinated with the national program and see where it's going.

Dr. Ponwith: In fact, I just got word that there is going to be a pilot study on electronic reporting that will be happening in the South Atlantic. This pilot isn't just to see whether it works in the South Atlantic but its applicability nationwide, which is a great leadership opportunity I think in the region.

Dr. Crabtree is right, they are doing some pilot field data collections using electronic reporting, and there are in addition some public studies on how you groundtruth the electronic reporting by validation on the dock or through some statistical procedure. If I were to read the tea leaves I think this is the direction that we're going, and including in here an expectation that people will report electronically puts us on very good footing with one of the basic requirements for a successful electronic reporting program, and that is that it's mandatory. I think that this puts you ahead of the game for all when all of those pilot studies start pointing us in that direction.

Ms. Shipman: And I agree, I think that's great. My only question is the Alternative 1 no action. By the time we move forward with this, that existing data reporting system may have changed, so I just think we need to be aware of that. It may be this particular thing and the current reporting requirements may be way outdated by that point in time.

Mr. Currin: Yes, it may mirror one of the alternatives that we have down below it. Any other comments or questions on this action? Okay, I see none.

Ms. Quigley: On Page 54, private recreational alternatives, there is really only one; implement a voluntary logbook for discard characteristics; for example, size and reason for discarding for vessels with a state recreational fishing license.

Mr. Currin: Comments or questions here. I know we've talked about this some on a state level, and there seemed to be some statistical issues with an analysis of voluntary logbooks and the like. I think the idea here - and I probably was one to push this as much as anybody - is to try to take advantage of the willingness of many folks in the recreational community to provide information as we heard last night and the first night from the public that they're standing ready and willing to help with anything that they can. This was kind of the idea and it may take some scientific tweaking and certainly some very thoughtful design to make it useful, but that's the intent here. I don't know how far down that road we are.

Dr. Cheuvront: Having looked at this issue before that, yes, there are some statistical problems with a voluntary logbook, but you also get good PR by having this. One of the questions I wanted to ask is whether the logbook has to really truly be a logbook or does this alternative also encompass other methods of data collection such as perhaps even online data collection?

I mean it can be done very inexpensively literally for $\$ 200$ a year on Survey Monkey or something, and you can get people to report their catches. The data are summarized and present to you however often you want. So with literally a couple of hours worth of work and $\$ 200$ a year you can do what amounts to a recreational logbook on a commercially available program on the internet called Survey Monkey. I mean that kind of an approach might not be a bad way to go or at least to go ahead and collect some of the data and see if it works.

Mr. Currin: Well, my only concern is if go to the trouble of collecting regardless of how easy it is, that it's useful once it's collected and analyzed. And it may be that we can learn something from the implementation of the electronic logbook and the analysis of that and groundtruthing of that through whatever methodology they develop that would make this approach useful as well.

Dr. Crabtree: Just one caution and, of course, I think the private recreational catch data is going to change, too, but just be aware that everytime we create another data set like this and particularly something that's voluntary, it's going to be full of a lot of unknown biases, and you're going to create now another data set that's going to be different from the data set that's coming out of the other survey and is likely going to be what you're going to be using in your assessments and things.

You're just kind of setting yourself up to have conflicting information that's going to create issues for us with the public; so while it sounds like a good idea and good public relations, it could backfire on you, particularly if it showed something very different, but the scientists said, well, it's not representative and it's probably biased and we're going to have to use this data set. That's kind of the trouble when we generate all these multiple data sets.

Mr. Currin: I understand and we need to avoid that, and before I would suggest embarking down this road, we need to have a good idea that it's going to be useful, that it's not going to be fraught with biases that we can't estimate or identify and that it's in fact useful for management, because nobody else wants to go through the efforts to fill out paperwork or fill out an electronic or website with information that's going to be tossed out because it has got problems.

I guess the only reason I'm carrying it forward or trying to is to make sure that some effort is put into assessing whether it's going to be useful or in fact what needs to be incorporated within the survey to make it useful. Anybody else have comments or questions? Okay, why don't we take about a ten-minute break?

Mr. Currin: All right, we're going to start. Before we leave that issue of the voluntary logbooks and the like, I don't want to keep pushing this thing if it's going to end up on a dead end somewhere ultimately. If we can make some strides - and I don't know the best way to go about that, but in talking to Roy about it is perhaps some of the folks in the MRIP Process have given some thought to something like this already.

I'll try to contact Preston Pate or maybe the staff can contact their folks they know that are involved in that to just see if there has been any discussion of the potential validity of this type of approach. I know it has got the potential for all kinds of biases and problems in it. If those can't be overcome, then we don't need to carry it forward and keep talking about it. All right, the next action.

Ms. Quigley: this is the second to last action, Page 55, Update Wreckfish ITQ Program. This is the one alternative in the document for which you have a preferred; modify the Wreckfish ITQ Program to keep the Wreckfish ITQ Program and update it to meet the new requirements of MSA. Of course, the other alternatives were eliminate the ITQ Program and replace with alternate effort-limiting criteria for participation; and eliminate the ITQ Program and do not replace it with any effort or participation limiting criteria.

With regards to Alternative 4, the wording indicates to me, maybe not to others but to me, update it to meet the new requirements for MSA, if other subalternatives are going to be considered such as perhaps some of the characteristics of the ITQ Programs in the Gulf such as specified landing times, you have to hail in when you're about to land or specified landing locations, you might want to consider them here, but you might want to change the wording of the alternatives to say something like "updated to meet the new requirements in MSA and other characteristics" or something like that, and other changes.

Ms. Merritt: This might be an appropriate time for us to go back to a comment made by Roy and back up on some of the LAP Committee comments regarding the long-time neglected ITQ Program for wreckfish that does deserve some attention as soon as we can do that. But I think it needs special attention in that as Roy said perhaps split it out of 18 and treat these LAP Programs separately from 18 , and separately individually with wreckfish being a higher priority.

Not that any of them are less important; it's just that one has been neglected for so long, and I think it's going to require a lot of work to flesh out some of these alternatives. Kate, I don't know whether I missed in the beginning; did you mention that the staff is going to work together with - okay, I'll let Kate bring that up. But, anyway, I would like to make a motion that we split the review of the Wreckfish ITQ Program out of Amendment 18.

Mr. Currin: Motion by Rita to split the Wreckfish ITQ Program - perhaps review of the ITQ Program? I don't know but I think you need a little bit more explicit here about what we're going to do.

Ms. Merritt: Okay, I'm sure that my wording would be correct; yes, split review of the Wreckfish ITQ Program out of Amendment 18.

Mr. Currin: Motion by Rita; is there a second? Second by Roy. Discussion? Duane.
Mr. Harris: Just a question; this is with the intent that it would be a separate amendment and we would be moving forward with an amendment for the Wreckfish ITQ Program immediately; is that correct?

Dr. Crabtree: That certainly was the intent of my second, and it's really a redesign of the Wreckfish Program. We are going to do more than review it. We're going to have to make changes to it. Some I think the law requires us to make; another I think the council will likely decide they want to make.

Mr. Currin: Yes, I'm not sure how to appropriately describe that, but I just wanted to make that it was just more than split the Wreckfish Program out, because it wasn't very -

Dr. Crabtree: How about if we said split the review and modification of the Wreckfish IFQ Program?

Mr. Currin: Are you okay with that, Rita, since it was suggested by your second. Other comments or questions? Duane.

Mr. Harris: Do we need to make it clear that it will be a separate amendment. It's not clear here just separating it out of Amendment 18 - and include it in a separate amendment; is that what we need to do? I want it to be very, very clear what we're doing here.

Ms. Merritt: We now have it on the screen as split the review and modification of the Wreckfish ITQ Program out of Amendment 18 into a separate Snapper Grouper Amendment.19.

Mr. Currin: Further discussion? I see none; any objection to that motion? I see none; the motion is approved.

Ms. Quigley: I just to remind people with regards to specific actions under there, NMFS staff and council staff were going to get together to discuss some of the options to put under that to include the new requirements of the MSA and other options with a review in September. I think the intention was for the staff to get together and then come back to the Snapper Grouper Committee with some options in September.

Then we just have one more action in Amendment 18, and that was regarding designating EFH and EFH-HAPCs for snapper grouper in extended jurisdictional areas under Action 1 with two alternatives; designate EFH and EFH-HAPCs for snapper grouper in the northern areas
encompassed in Action 1; and Alternative 3 being track the Mid-Atlantic Fishery Management Council's EFH and EFH-HAPC designation.

Mr. Currin: We've have decided at least for now to keep the extension of the fisheries management unit in this amendment with the idea that it might be implemented at a date in the future, but as long as we're working on that extension it makes sense to keep these alternatives in here regarding EFH.

I think Alternative 3 would satisfy - Red, you speak if not - the Mid-Atlantic's concerns about someone getting on their turf and taking over their EFH designations and the like, but I think we can sort that out amicably. They've already made some strides to limit some gear or prohibit some gear in the areas where these snapper grouper that we're concerned about are living. We can certainly look at that and if we don't think that's adequate, perhaps we can then make suggestions to them on how they might modify it that would satisfy us. Wilson.

Dr. Laney: I'm not on your committee, Mr. Chairman, but I did want to let you know the Nature Conservancy, Virginia Chapter, Jay O’Dell, has done a tremendous amount of work on habitat off the Mid-Atlantic Bight. He and the National Marine Fisheries Service actually have been collaborating I think on this. He has the entire Northeast Fisheries Science Center Trawl Data Base as well as their benthic data base and has been doing a lot of work on that. I think that could very well inform any future EFH discussions.

Mr. Currin: Yes, Wilson, it may well help. We have to keep in mind I think that really what we're concerned about here are currently two species, perhaps three that are utilizing these deepwater areas and have fairly restrictive habitat requirements as best we -

Dr. Laney: Right, understood, Mr. Chairman, but I know he has analyzed about 150 species thus far; and whether those are in the data bases or not, I don't know, but it certainly wouldn't hurt to ask him.

Mr. Currin: Thank you very much for letting us know about that. Okay, everybody comfortable with these alternatives for EFH designations? All right, that's all for 18. We've still got the golden tilefish issues. Everybody comfortable with leaving that analysis here; and I guess once we decide how we're going to go with that, that may determine whether it's considered for splitting out and developed as a LAPP or whether our endorsements that have been recommended by the AP are the way to go at least at this point.

We didn't have anything in here about golden crab, so the LAPP Committee I don't think decided how they were going to deal with continuing with the consideration of a Golden Crab LAPP. Is the Snapper Grouper Committee going to do that, too, or how is that going to go forward?

Ms. Quigley: Well, at the last council meeting in March the council approved of going ahead with a Golden Crab Amendment, and so no action by this committee at this time. We'd just continue that process.

Mr. Harris: The timing on that, Kate, was there a timing on that recommendation from the council in March? Do we have a goal in mind as to when we'll complete that effort; do we know?

Ms. Quigley: We don't at this point in time and it was not prioritized at the last meeting. There was no priority chosen from what I recall between golden crab and wreckfish. They were going to move as staff time allowed. However, of course, there is this urgency felt by the fishermen, but there was no timeline identified.

Mr. Currin: Okay, that's it for 18; any other questions or comments about Amendment 18? All right, thank you, Kate. Our next agenda item, other than the timing and task, is the Comprehensive ACL Amendment. Rick is here ready to go.

Mr. DeVictor: Mac, I was just going to say Carolyn Belcher is prepared to give a presentation on ABC Control Rules, what the SSC has discussed, and that may be appropriate before the Comprehensive ACL discussion.

Mr. Currin: I’m sorry, Carolyn, I'm working off an old agenda I printed out at home so I didn't have it on my detailed agenda.

Dr. Belcher: What I'm going to do is basically give you - I'm not going to put into too great detail, but give you a general overview of what we've come up with so far. We consider it to be the final concept for the ABC Control Rule. The SSC pretty much arrived at this this week, and we are continuing the right to reserve continued drafting on it right now.

We're still making sure that all the language is capture in such a way that it's easily understood to someone who wasn't involved in the group. Obviously, inherently, we know what we did, but we want to make sure that everyone outside of the group knows what we did. Basically, what we've done is it is a tiered approach. We have, first of all, a level which we are calling dimensions, and this is a dimension relative to how we're looking at scientific uncertainty.

The things that we identified as the four main points are relative to stock assessment information, the type of stock assessment we have, are we looking at actual estimates of $F$ and $B$ or are we looking at proxy values, what do we have available in terms of data streams. At the lower end of the tiers, as we go through the tier discussion, is it in a situation when we have scarce data or very unreliable data?

At the top end is basically a lot of the stock assessments that we're currently running, the statistical catch-at-age model that capture a lot of the degree of uncertainty in the population. The second identified source of uncertainty comes about - what we've used to get at it is uncertainty characterization. This is how well the model has captured the scientific uncertainty.

The ultimate level for us in terms of tier was a model that not only addressed all of the uncertainty within the population parameters but also was able to capture environment uncertainty as well, which obviously we don't have that particular level currently, so most of our stock assessments are operating at some of the mid-level tiers.

Thirdly, we look at stock status. This obviously in certain situations, if the issue of it is overfished, overfishing, do we have one of those components like in our case of vermilion where we still have the overfished is unknown. Those are all factors that weigh into our buffer as well. Then, lastly, which is new to some of you, probably, is this assessment of biological risk, which has to do with the biology of the animal in terms of productivity and susceptibility.

It's looking at issues of reproduction, what type of resiliency the population itself has. There are a couple of methodologies that have been formulated through both NMFS and through the MRAG Group that we were looking at this week, and right now we have dovetailed the MRAG component into this particular process.

The dimensions in tiers, obviously, this is very small, and I apologize for that, but for you to get an idea on how many levels we're working at within the four dimensions, the majority of them, obviously with the exception of the last group, have five levels to them. In the case of the PSA analysis there are only three and that's because of the fact we're working with the MRAF distinctions of high, medium and low relative to the risk that comes out of the PSA analysis.

When we look at the assessment information dimension and its resulting tiers, what you're going to notice is that these discounts, as we're calling them, are pretty much equally divided amongst the dimensions. Right now this is an assumption that we have to make because we don't know exactly how this is going to pan out in terms of what actually is the differential in terms of information you get as you get more information from the model.

In the situation with the assessment information what we're looking at - and these are all objective so that we're not really sitting there in terms of - if different groups of scientists were sitting down with this method, we should all come up with the same weighting. We made it as objective as possible across all the dimensions. In the case of the assessment information, what we're looking at for our distinctions are on the upper level where you have no discount whatsoever or no penalty, you're looking at a quantitative assessment that provides estimates of exploitation and biomass and includes msy-derived benchmarks.

There is a $2-1 / 2$ percent discount, and I'll talk about what exactly the discount is in a minute. We look for reliable measures of exploitation or biomass and we have no msy benchmarks, but we're using proxy reference points. The less we know the more of a discount we add; so as we go down the list and with the lower level of the assessment, we're at the situation where we have scarce or unreliable catch records, and that gets a full 10 percent discount.

What we've done is we're working with the premise that we're looking for a 50 percent chance of overfishing, and we're working backwards from that point. We've discussed the fact that we're working with typically OFL as a function of msy values, and we're looking at a rate at Fmsy and multiplying that times the current biomass for our starting point.

What we're using is the P-star approach that the Beaufort Lab has developed to get at this percentage of the probability of overfishing and that assignment to help determine what these levels are. So, as we're working forward what we're doing is starting at 50 percent chance of
overfishing. The less we know, the smaller that chance is that we want to take that and we're going to continue to overfish, so that's where these buffers come into play.

For every one of these informational situations where we know less and less, you subtract farther away from 50, so you all were looking at about a 25 percent chance. This will actually adjust downward and assigning a range on that is from 10 to 40 percent. What we're doing is starting at 50 and backing our way down.

So in situations where we have four levels, all of them at the worse case scenario, you're looking at a 40 percent discount so you'd have to be looking for the situation in which you have a 10 percent chance of overfishing. In that situation you're really trying to be highly risk averse because you really don't know what is happening in that stock. Everybody following okay?

Dr. Crabtree: Back up a minute and explain to me how you got to the 10 percent risk of overfishing in that situation.

Dr. Belcher: Well, there are four levels, and, again, I need to back that up. We have dimensions and what we've done is equally allocated the discount or the buffer penalty across those four dimensions, the assessment information, the stock status, the characterization of uncertainty and the susceptibility.

Right now you really don't know how weight to give if there's a chance that one has a higher weight than the others. Right now we don't have information available to us to make that distinction, so we've just basically done equal allocations across the four dimensions. Then within each of the four dimensions, depending on the ranking system we've come up with, they've been equally divided as well with the hopes that in the future, as we get more information, we'll be able to reestablish what those weights should be. They may not be proportional; right now they are, so it's a starting point. Rita.

Ms. Merritt: The buffer add-on still isn't clear in my mind because you're coming up with basically one number, right, so when you have these buffers according to these different dimensions, they don't really address individual sectors; so if you have one sector that have a great history and one that has mediocre history and another one with no history, you have to come up probably with some middle ground is my guess, right?

Dr. Belcher: The way that a lot of this captured is basically we do the stock assessment and the stock assessment has its own measures of uncertainty, so in some ways what you're saying is embedded in that. At the next level relative to the ACL, that's where I think you're discussing about how you determine where best to rank out where is your highest risk of overfishing still occurring.

In the discussions that we had for that PSA approach that NOAA had prepared and the MRAG had prepared, that was the one thing that the NOAA procedure did account for was the issue of the sectors within a fishery. There was a weighting that they were doing that would basically take you from OFL to ACL. It didn't give you the intermediate step of ABC.

So in that situation that was where a lot of our discussion occurred as to the applicability of that for what we were doing. Because that has more management risk built into that, we decided to go with the one that didn't account for those sector differences and the concerns that you have. That would almost be at the level of what you would need to get to be able to buffer further from our ABC value, and it would help you get your allocations. We actually recommended that may be an approach that the council should look at to help determine the ACLs.

Mr. Currin: Unless there are specific questions about clarity on this, Gregg made the suggestion since he sat through this during the SSC meeting, that if we can let Carolyn get through this thing, that it all kind of comes together and makes more sense toward the end. But if you're lost or confused about something as we go through, that’s fine, but let's try to let her work through this as best we can.

Dr. Belcher: Okay, this table here shows the application across the Amendment 17 stocks. Again, I apologize for it being small, but you can see across - what I'll do is I'll pull the species that we basically inserted into the table recently, which is gag and vermilion. What we did is first you look at the assessment information. It got a score of one or a range of one, and that was because it has one of the higher assessment classifications. We actually have the measures.

The uncertainty characterization is a function of how complete did we characterize the uncertainty in terms of, again, do we encapsulate the environmental data. That would put you at the top and then the cascade down from there as to whether you're working about the statistical modeling to get at better measures of uncertainty, are you looking at the uncertainty in each of the parameters.

As you get farther away from that and less sensitivity, we get to the lower rankings and you're looking at sensitivity runs being done or no sensitivities being done, that puts you at the bottom. In the case of gag it has a rank of three. When we get into the description of the status, basically not overfished or overfishing so it gets its ranking of a three.

The PSA MRAG score, which ranges from zero to four, four being high risk, it received a ranking under their program of 3.52, which gave us the fact that it’s high-risk category, which would be three. So when we go through and assign a buffer adjustment, what you find is that there was no penalty relative to the assessment. It was a well-done assessment. The uncertainty classification, it has a discount of 5 percent, so it dropped you from that 50 percent chance of overfishing and now we're saying because of that it is a 45 percent chance you need to look at.

The status, because we know both of these conditions, that's another minus five on that, bringing us down to 40 percent, and that the PSA, because of that risk, dropped it another 10 percent, so we end up with looking at a critical P value assigned to a 30 percent of overfishing. That's how that worked out.

When we did vermilion and walked through the same steps, basically we find that the assessment received a ranking of two, so it wasn't quite as good as the gag's assessment. We ended up with the uncertainty characterization was the same; the big difference being that we have an unknown
overfishing, which gave us actually the highest rank or highest penalty assigned to it, and it also has a high risk factor assigned to its PSA.

So when we bring it through, we now have to look at a P-star value of 27-1/2 percent chance of overfishing. This is how we're getting at where is it you're looking at for that level. When you look to see the estimate, the estimate that we're looking at is a function of that chance that we have for that.

It just basically is as the model is less perfect, for lack of a better term, the more of a discount and the farther away you are from that 50 percent chance. In the situations where you have rebuilding and they're overfished, we have the rebuilding target percentages, which is your percent chance that you will rebuild within your projected timeframe.

In the case of snowy grouper we'd be looking at a rebuilding target or stream that has a 70 percent chance of being rebuilt. In the situation of red snapper, which unfortunately I don't really have it - I didn't explain it to you earlier on - is we did find a depletion threshold rule that we defined for the stock.

Basically in situations where your biomass estimate is 10 percent or lower of the virgin stock, we would default to directed fishing not being allowed, but we'd also be able to carry in a rebuilding target percentage that would come forward to help determine where we need to be looking to have our values for the ABC to help us restore it back.

So in the case of red snapper, where we're 3 percent, we would automatically be put in that situation where we would be looking at ending directed fishing: and our rebuild target, 70 percent we'd be looking at for red snapper. And with that, those are examples. John.

Mr. Carmichael: Just to comment a bit on the range and how we derived the overall total range, this was based on the council's motion that said look at an overfishing probability of 10 to 40 percent with a centerpoint of 25 . The group started with, well, let's try to come up with something and let's say that in the worse case scenario you should get to that 10 percent range that the council mentioned.

So if you take a stock that has no assessment, unreliable catch records, no treatment of uncertainty, the PSA scores says it's very risky and the status is completely unknown, then this rule would say the ABC should be based on something that gives you a 10 percent of overfishing occurring, so it accounts for uncertainty in that way.

Now, in the best case a stock such as, say, the golden tilefish, with an assessment in that nature where you have estimates of all the parameters and you have the msy-based references estimated and you get a one; you have a good treatment of uncertainty with sensitivities that carry the uncertainties through into the projections, you get a one there.

If it turned out to be not overfished and not overfishing, there would be no buffer; and if it were a stock that its PSA says there is low risk, there would be no buffer there. So the recommendation
of ABC would be at the 50 percent chance of overfishing, which is kind of the default of where it has always been up until this time. That is the justification for the overall total range.

Dr. Belcher: Additionally, this only applies in situations where we actually have an OFL measure that is related to total weight in fish as well, so we have to have some measure relative to an OFL to apply this. In the situations where we're dealing with landing streams, this is, again, why we've asked to have a workshop to try to look at how to best get the estimates for OFL for those situations where all we have is a landing stream.

Mr. Currin: Thank you very much. Questions for Carolyn? Brian.
Dr. Cheuvront: Well, it’s not so much a question; I just want to make a comment. I appreciate the fact that you all put this together because it gives us some concrete ways of thinking about some fairly abstract notions that we've been having to deal with, and it is a way to help us quantify risks and levels of risks. I really appreciate that because it helps us when we're going to make those decisions about what level of risk are we willing accept. Looking at this on the surface, it looks very reasonably done and useful tool as well, so I just want to say thank you to you and the rest of the SSC for doing it.

Mr. Currin: That was no easy exercise, was it? Very good job, it appears to me. David.
Mr. Cupka: I want to express my appreciation to the SSC for their work on this. Not only does it give some concreteness to some of these concepts, but it also I think removes some of the subjectivity and makes it more standardized no matter who is looking at it. That's very useful as well.

Dr. Laney: Carolyn, you mentioned that right now everything is proportional across your four dimensions but that you all might decide at some later point, I guess, after further consideration, to give some different weights to those. Do you have any thoughts about how you might wind up weighting them at this point in time, either you or John?

Dr. Belcher: We have not discussed that, but we have acknowledged that fact that there is obviously in the mathematics the two assumptions are the dimensions are independent of one another, that there isn't any kind of one doesn't affect the other; and also that each of those has equal weight within the dimension right now.

But until we start seeing how this plays out with some of our applications, we really won't have a handle for how much really there is a difference in it. There have been discussion or I guess I should say suggestions from other folks in the Mid-Atlantic. We had one that was wanting to look at the possibility of simulation runs in the future.

Mr. Carmichael: One of the things the committee discussed was the fact that in the best case scenario you would end up with recommending an ABC with the overfishing probability of 50 percent whereas the council's motion was 10 to 40 . Some members acknowledged that if the council did not like this approach and didn't think that in the best conditions fishing at 50 percent
were appropriate, then if you were to perhaps say, well, in the best case fish at a 40 percent probability of overfishing, then it's enough to adjust this thing.

Carolyn and I were discussing what would happen in the case if it went lower or if you got down to, say, the worse case scenario where you subtracted 40 from 40, you'd essentially be saying your ABC becomes zero, so you wouldn't allow any fishing. I mean the opportunity is there to adjust that range to be more conservative if the council chose, but other members recognized that the council could choose to be more conservative in setting its ACLs, and it could adopt the sector-based approach as Rita mentioned in setting ACLs and ACTs.

Mr. Currin: Yes, just from my preliminary look, John, at the PSA analysis and thinking about our stocks, it doesn't seem very likely, at least from that parameter, that we would have too much trouble or too many occasions to end up close to 50 percent just because of the nature of our stocks and biological life history characteristics and vulnerability and the like. I don't know; there may be some.

Mr. Carmichael: At least nothing in the snapper grouper, having looked at the MRAG examples, the PSA score alone will bring everything down to some extent.

Mr. Currin: Yes, that's kind of what I was getting at, and I guess I'm focused on snapper grouper for some reason. Other questions or comments for Carolyn? All right, thank very much and great job and pass our thanks along to all the SSC as you see them. Before we get into the Comprehensive ACL Amendment, there is one item from 17 that we need to deal with.

If you recall we changed our approach with management of golden tile to establish accountability measures for the recreational community. We currently don't have an allocation for the recreational community for golden tile. Now the way the quota was established, the commercial quota was based on a 98 percent commercial allocation, if you will, or assumption of that; 98 percent of the landings associated with the commercial industry and a 2 percent recreational allocation, if you will. That's kind of the way we did it with snowy grouper when we set that up. I guess we need some alternatives, Rick, to include in that document.

Mr. DeVictor: Yes, I think we have to specify the recreational ACL. As you have an action in there to specify the recreational AM, we could include an action to look at golden tilefish allocations based upon the range of years that we have in the past.

Mr. Currin: And that would make sense to me. George.
Mr. Geiger: And in addition to using the Boyles’ Rule that we developed in our Allocation Committee.

Mr. Currin: That might represent one alternative. Is that sufficient, Rick, a couple range of years which we used to establish the snowy allocation and then the application of the formula derived by the Allocation Committee. It would give us three alternatives for recreational allocations there. All right, on to the Comprehensive ACL Amendment, Attachments 19 and 20 in your Briefing Book under Snapper Grouper.

Mr. DeVictor: There is not much to report on this front. Attachment 19 lists the actions that will be in the Comprehensive ACL Amendment. Again, for snapper grouper this would be 63 species and those are species that are not undergoing overfishing. The stock status is unknown for many of those species.

The list in Attachment 19, which we've gone over before, would specify ACLs, ACTs, accountability measures, allocations between commercial, for-hire and recreational sectors, and then regulations to limit the total mortality to the ACT, and we have a whole list of actions there. We have scoped this amendment.

Two things that you may want to talk about; we talked about this before about removing certain species from the FMU. Certainly, that has been brought up, especially if there have been predominantly state landings. Also, this idea of ecosystem component species that was outlined in the final rule to National Standard 1 Guidelines.

Real quickly, this comes out of the final rule where they say that you can specify certain species for the ecosystem component. These species would not be considered to be in the fishery and you would not need to specify ACLs or ACTs or AMs for these species. For example, you might want to include these species in there for data collection purposes.

However, it specifies that to be considered for possible classification as an ecosystem component species the species should - and then there is a list of five things; be a non-target species or nontarget stock; not to be determined to be subject to overfishing, approaching overfished or overfished. In the case of a lot of these species the stock status is unknown, so I'm not sure how that work.

Three, not likely to become subject to overfishing or overfished according to the best available information in the absence of conservation and management measures; and, finally, not generally be retained for sale or personal use. I think a handful of these species, if they're caught they are sold. What we have included at this time is Attachment 20 which outlines landings of these species. We thought that perhaps this could be a starting point.

It shows landings from 1986, commercial, recreational and headboat for all 73 species. For example, you can see according to ALS and such small mouth grunt, for example, has no landings. I guess at this point we're looking for direction to staff on what would you like to see, what data sets, what sources of information that would help you discuss ecosystem component species or removing species from the FMU.

Finally, I point out that the schedule is to receive from the SSC OFL and ABC recommendations by April 2010. The committee may be in a holding pattern to some degree waiting for those recommendations.

Mr. Currin: Thoughts or comments? It seems to me that what we need or I need at least some additional information or guidance on how the unknown status will affect consideration of inclusion as an ecosystem species. If there is any kind of guidance regarding threshold landings,
it's about the only way I know to look at them right now. I mean, zero landings, that's pretty obvious. We've got, what, depending on what years you look at, maybe one or two, not many.

But if you establish a threshold of an average of less than a thousand pounds or two thousand pounds for the entire fishery, then a lot more species enter into play. Roy, does the region or anybody have any kind of guidance on threshold landings for establishing or designating ecosystem components in the plan or we just might as well forget it and start dealing with all of them?

Dr. Crabtree: Well, I'm not aware of any specific number that has been put down anywhere, but I would say that there are things in there about it's not targeted and it's sold and it's not generally retained and if the landings are very low that would seem to support an argument that people by and large aren't keeping them or retaining them, but exactly where that number is, I think that's something we would just have to look it. I don't have a magic number.

Mr. Currin: None of the other regions or councils, to your knowledge, are looking at that kind of approach or have gone part way that road?

Dr. Crabtree: Not at this point. I think everyone is looking at two things; one, are there species that ought to be removed from the plan, and we have done that. The Caribbean has removed some species from their plans, the Gulf removed some species from their plans a decade ago, but not the ecosystem route.

My suspicion is that there will be only a few species that probably would meet that kind of criteria in here. I haven't looked at this table before and I think this is a good start at looking at it. I think for some of these species where the levels of landings are really de minimis, that would to be bolster an argument for either ecosystem species or potentially no need for federal management.

The other thing, in terms of that I can think of, Rick, is if we had something somewhere that would show the breakdown of the catch in the EEZ versus state water fisheries, if we have that somewhere. For example, it would be sufficient to just show me a proportion - and Jack is handing me something, but it's old - so I think that would be another useful thing in terms of looking at it.

Mr. Currin: So, Rick, you said that's in that table in Attachment 20?
Mr. DeVictor: This is in Attachment 20 in an Excel spreadsheet. There is another tab, if you click on the bottom, and this is 2005, but it's predominantly state-landed species, and you can see the percent landed in state waters and the poundage associated with those.

Mr. Currin: Everybody see that?
Dr. Crabtree: I look at some of these where there are a couple where at least it's reading that a hundred percent of them are landed in state waters. I think you can make a real strong argument that there is not really a need for federal management of those, and we ought to look at removing
them from the plan. Now, it's probably debatable for some of these if they really are all landed in state waters. I think this is just recreational landings, but it's sure a starting point to give us some guidance towards what species we might think of removing from the management plan.

Mr. Currin: Well, there are both recreational and commercial columns there for one year, anyway. Of course, it's not a percentage for the commercial; it's total landings, I presume. Well, as a first cut, then, perhaps we could look as far as total landings go for the last three or four years - I don't know what is adequate for that - through '08, either '06, '07, '08 or ' 05 , ' 06 , '07, '08, three or four; I don't know what is appropriate.

Then let's get a chart maybe developed with landings - establish some thresholds and we can start at, say, those that are above 5,000 pounds, those that are 5,000 to 1,000 , and those that are less than 1,000 , and maybe we need to cut that up finer, and then do the same thing with the percentages as we best we can estimate, the same sort of table with thresholds of 90 percent. I don't know how far down we go.

Dr. Crabtree: Let me suggest this. I would say, Rick, to the National Standard 3 Guidelines that are in the regulations, and they list a whole series of criteria that you ought to follow to decide whether species require federal management or not. I think if you kind of went through these and just basically answered the questions that are in there, that would be a first cut to identify at least which ones potentially may not really need federal management.

Then of the things that we're left with that we think do require federal management, then I think we could take a look, okay, are there some of these that we think would be ecosystem species, and we might could do that with either one. But, I think going through the guidelines and looking at what they lay out would be a good starting place, and that would certainly be a defensible way for us to come at this in terms of paring it down.

Mr. Cupka: I agree with Roy, that's probably a good starting place. I can remember back when this FMP was being considered and was being looked at and going into Dr. Joseph's office. We were talking about, well, should we split these into smaller groups or what. Obviously, we didn't have any guidance to go by, and we ended up just putting everything in there that was a reef fish that could potentially be caught.

Of course, back then there was no talk about ecosystem species or anything like that, and so I'm sure there are things in there that over the years we've never questioned. It just started out that way, but maybe we need to take look at taking some of these out. We'd be in better shape, that's for sure, in some of these reports.

Like I say, originally it was just, well, any of these species that could be caught by this one fishery that was fishing for snapper grouper, they may catch that and they may catch one a year or something, but we just grouped everything that we could think of that could possibly be caught into the management unit.

Mr. Currin: Well, I'm not opposed to Roy's suggestion, but just having read the Act and the Standards, they're fairly nebulous and that's kind of why I was trying to get a little more guidance.

Dr. Crabtree: I'm not talking about the Act; I'm talking about the guidelines, which has a lot more information in it, and so to me the starting point is go through - and the National Standard 3 Guidelines, not the ACL Guidelines, but the National Standard 3 Guidelines, which explicitly addresses what things you should evaluate for including in a management unit.

All I can advise Rick, I'm sure Monica and our staff will work with you, but go through those, and that's to me the starting place for things we may remove from the plan, and then we could go through the ACL Final Rule and just the ecosystem part and see how many of those questions can we come to that kind of answer.

I think it will be relatively few in terms of ecosystem species, but I think if you go through the National Standard 3 Guidelines I think you will find quite a few of these that really don't meet the criteria for what would require federal management.

Mr. Currin: All right, thank you. Does that seem like a reasonable way to start, Rick? Of course, if you've got other ideas, then have it.

Mr. DeVictor: No, that sounds fine with me.
Mr. Currin: All right, what else, Rick?
Mr. DeVictor: That's all I have.
Mr. Currin: Anything else anybody else has got on the Comprehensive ACL Amendment? Is there any other business to come before the Snapper Grouper Committee? John.

Mr. Wallace: According to the remarks that I've heard from the public about assumed interaction of snapper and the shrimp industry, I'd like to make a couple of comments. Unlike the Gulf, Mother Nature has kind of blessed us for having a natural boundary between the two fisheries, but I have concern with the rebuilding of the snapper and the influx of artificial reefs on both the government level and the fishing club level.

These reefs may be creating a level of manmade interactions between the two fisheries. These reefs are designed to draw fish nearer and nearer to the shore. I have heard from both recreational fishermen and divers that they're seeing the fish closer and closer to the shore. I just don't want to get into the same Pandora's Box as the Gulf is in right now with the snapper grouper because of a manmade issue.

Mr. Currin: Thank you, John. Anything else to come before the Snapper Grouper Committee? If not, we've got out timing and task motion, Rick, to do. Rick is going to bring his list up on the screen for consideration. Then I would entertain a motion to approve the timing and tasks.

Mr. DeVictor: This list focuses on what occurred in Amendment 17. It is a laundry list of what staff and team has to do for September. I don't know if you want me to go through it or read it.

Mr. Currin: You might just add that allocation issue for golden tile under there. I'm sure you've captured it down below. Everybody okay there?

Mr. Harris: Did we capture putting the way points on the chart; is that in there somewhere? Okay, I missed it.

Mr. Currin: Does 17 look okay to everybody?
Mr. Harris: Mr. Chairman, I would move the approval of the timing and tasks as depicted in the direction to staff for Amendment 17.

Mr. Currin: Second by Robert. Discussion? Any objection to that motion? I see none; that motion is approved. We had a few things that I think Kate captured for 18, and there is some direction on the Comprehensive ACL which we just went through. It's pretty clear cut. Maybe we can review those at the council session just to have another review. All right, I think that ends our business and we will adjourn.
(Whereupon, the meeting was adjourned at 4:40 o’clock p.m., June 11, 2009.)

Certified By: $\qquad$ Date: $\qquad$

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June 27, 2009

# SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL SNAPPER GROUPER COMMITTEE 

Hutchinson Island Marriott Stuart, FL

June 10-11, 2009

## TABLE OF MOTIONS

PAGE 61: Motion is to change Alternative 3 by eliminating golden tilefish from the list of prohibited deepwater species.

SUBSTITUTE MOTION, PAGE 63: Motion to remove golden tilefish from being referenced in Alternative 3; eliminate Alternative 4 and remove reference to the allowable harvest area for golden tilefish from 100 meters to 300 meters depth that is currently in Alternative 5; also, removing golden tilefish from the subalternatives for 4 and 5 that specify VMS. Motion carried on Page 65.

PAGE 71: Move to modify Alternative 2 to set up a recreational ACL along the lines of the way Alternative 2 is structured for snowy grouper. Motion carried on Page 73.

PAGE 73: Make a motion that the motion just made to modify Alternative 2 to set up a recreational ACL along the lines of Alternative 2 as structured for snowy grouper be our preferred alternative. Motion carried on Page 73.

PAGE 89: Motion that Alternative 2 be the preferred alternative. MOTION REWORDED ON
PAGE 91: Motion now reads that the MSY Alternative 2 be our preferred alternative. Motion carried on Page 91.

PAGE 91: Motion that to select Alternative 2B as the preferred alternative. Motion carried on Page 91.

PAGE 92: Motion that the preferred alternative be Alternative 4, which is the longest time period allowable for rebuilding. Motion carried on Page 92.

PAGE 97: Motion to select Alternative 4 as the preferred alternative for a rebuilding strategy for red snapper. Motion carried on Page 101.

PAGE 101: Move to add a new alternative that, one, has the ACL expressed as zero landed catch; and then, two, sets up an accountability mechanism that is based on monitoring the expanded fishery-independent monitoring program; and that then tracks increasing CPUE
abundance over time; and accountability is based on that abundance increasing at an acceptable rate. Motion carried on Page 102.

PAGE 102: Motion to ask staff to develop the rebuilding timeline based on F 75 percent with the timeline of 35 years. Motion carried on Page 103.

PAGE 109: Motion to move Alternative 7 to the considered but rejected alternative section along with the analysis. Motion carried on Page 109.

PAGE 116: Motion to add the following: Alternative 2C, retain the current commercial ACL for gag of 353,940 pounds gutted weight and the commercial AM to prohibit commercial harvest of shallow water groupers when met; retain the current recreational ACL of gag, 340,060 pounds gutted weight; in addition, establish an ACL for gag, black grouper and red grouper of 662,403 pounds gutted weight commercial and 648,663 pounds gutted weight recreational. These values are equivalent to the expected catch resulting from the implementation of management measures for red grouper and black grouper in Amendment 16 and the gag ACL specified in Amendment 16; prohibit the commercial possession of shallow water groupers when either the gag and the gag, black grouper or red grouper ACL is met. Motion carried on Page 117.

PAGE 117: Motion to select Alternative 5B as the preferred alternative. Motion carried on Page 117.

PAGE 119: Motion to adopt Alternative 2 to update the framework procedure for the Snapper Grouper Fishery Management Plan to incorporate ACLs, ACTs and AMs. Such modifications would be based upon new scientific information indicating such modifications are prudent and make that the preferred alternative. Motion carried on Page 119.

PAGE 122: Move to split Amendment 17 into two amendments to be known as Amendment 17A to deal with the red snapper issues and Amendment 17B to deal with the remainder of current 17. Motion carried on Page 122.

PAGE 134: Motion to split the review and modification of the Wreckfish ITQ Program out of Amendment 18 into a separate Snapper Grouper Amendment.19. Motion carried on Page 135.

PAGE 148: Move the approval of the timing and tasks as depicted in the direction to staff for Amendment 17. Motion carried on Page 148.

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Snapper Grouper Committee Meeting Stuart, FL
Wednesday, June 10, 2009


South Atlantic Fishery Management Council
4055 Faber Place Drive, Suite 201 North Charleston, SC 29405

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Wednesday, June 10, 2009

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Snapper Grouper Committee Meeting Stuart, FL
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