SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

ALLOCATION COMMITTEE MEETING

Southern Wesleyan University
North Charleston, SC

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SUMMARY MINUTES

Allocation Committee Members:

Dr. Brian Cheuvront, Chair
George Geiger
Rita Merritt
Tom Swatzel
John Wallace
Robert Boyles

Council Members:

Mac Currin

Council Staff:

Robert Mahood
Kim Iverson
Dr. Andi Stephens
Julie O'Dell
Gregg Waugh
Rick DeVictor
Kate Quigley

Observers/Participants:

Dick Brame
Michelle Owen
Eileen Dougherty
Monica Smit-Brunello

I think or council members thought you were doing before, which is having comprehensive approach to how you're going to allocate across fisheries.

I talked to Shepard Grimes in our office who advises that council, and he said they're struggling. It's very difficult and they're having a tough time, just as this committee is, coming up with an approach that will work across the board.

Dr. Cheuvront: Well, that's a good lead in for Robert because he has actually tried to come up with a way to display for us in a visual sense I think the issues that confront us, what perhaps maybe this committee should be considering, what the Snapper Grouper Committee should be considering and the relevant parts of it. So if that's an adequate lead in, take it away, Robert.

Mr. Boyles: Thanks, Brian. This is my very, very paltry effort to get my hands around what we may be asked to do, what maybe our task is an Allocation Committee versus what perhaps may be the purview of the Snapper Grouper Committee. This gets back to John's comments earlier. Just bear with me; these are all just my chicken scratch. The notation is mind and it's probably incorrect, but it's the best I can remember from linear algebra. If you take according to what I've done here, C is basically catch history, and it is represented by – Mac.

Mr. Currin: Excuse me for interrupting, and I appreciate your effort and I think it has a lot of value, but we're still not to the point where we have defined what a catch history is yet. We haven't defined a time series over which we're going to average catch history.

Mr. Boyles: Bear with me. The idea here is if you look at the notation here you've got three different sectors. "C" is the commercial sector; "H" is the for-hire sector; and "R" is the recreational sector. You sum those together and you have – the total of what has been caught in the past is represented by the sum of those three parts. In my notation "F" I call future for lack of a better phrase, so just bear with me.

But the idea here is that you give – you look at the history of the catch in each particular sector. And let's look at the first equation; the "A" is allocation. "A" through "C" in the first line is we basically look at – the allocation would be some function of looking at – half of it looking backwards with catch history and half of it looking forward with whatever vision for the future of the fishery we have.

Mac, once we do define what catch history is – now whether that's how long a time series, that's perhaps something that this committee would look at. The idea of this representation is that we can discuss perhaps whether giving equal weight to the past and the future as represented by the 0.5 is appropriate or not and perhaps the discussion of this committee is also what is catch history? Do we look at the last ten years; do we look at the last fifty years; just what constitutes that data set.

So, perhaps I suggest that maybe the role for this committee is to discuss do we want to give equal weight to the past and to the future? That's the first question. The second question is what constitutes catch history; how do we define catch history; and that be the purview of this

committee. What becomes the purview in this case of the Snapper Grouper Committee is defining little "f"; what is the vision of the future, how do we allocate it?

So what follows there is allocation for – "H" is again half of the catch history that could be attributed to the for-hire sector plus some allocation based on a desired future condition. The idea here is to simply get us all on the same page with what this committee may decide to do in terms of making recommendations for allocation versus what the Snapper Grouper Committee might do.

I would submit that if we don't argue over – for the purposes of discussion that we give equal weight to the past and to the future and we come up with some definitions of how we define catch history. Then the real discussion and where the real, real hard part comes is defining in that equation what "F" of "C", "F" of "F", "H" and "F" are – just for purposes of discussion.

Ms. Quigley: For those of you that aren't mathematical or don't like to look at equations, Robert, you can correct me if I'm wrong, but this is kind of one way to discuss what are the goals and objectives of going about this exercise of allocating, what are the goals? So what this equation says to me is catch history is somewhere in the goals; looking at some future vision is somewhere in the goals; and assigning 0.5 and 0.5 says they're valuable.

Of course, that can change; you can go ahead and do different numbers. This is one way of listing out what are the goals and objectives of allocating and what weight should they be given. Then here is a list of definitions; this is what we mean by catch history, this is what we mean for a vision of the future. So for those people who aren't good with equations, I think this is what it's saying; what Robert is trying to say.

Mr. Boyles: You said it much better than I could, Kate.

Mr. Wallace: Can you put some example numbers in this? Let's go ahead and let's run the scenario with a sample number. Let's go with red snapper that we've got in here and put a – well, we've got to do it and let's see what it looks like.

Mr. Boyles: John, Kate said it right, we can discuss whether equal weight, looking to the past and looking to the future, is appropriate or not. I'm imagining we do have – you know, just get to Mac's point and we can look at X catch history; and we can ask ourselves is this something that the Allocation Committee will decide or this something that the catch history will be determined by the Snapper Grouper Committee.

The point here is to get us all on the same page and go forth to get us down the road. I claim no pride of ownership here. There are a thousand different iterations, a million different iterations here, and I picked half and half just for the points of discussion. Let's say you populate that – I suspect you could populate that model, if you will, that algorithm with everything but what constitutes little "f".

I suspect we do have catch data from the commercial and the recreational and the for-hire sector. I think the real difficult part, quite frankly, for the Snapper Grouper Committee is going to be

Mr. Geiger: Robert, I have a question. This is a cool idea, but – and correct me I'm wrong here – what I see this doing basically is using catch history to de facto set the percentage of allocations in sectors, but we wind up with a vision for the future and a set-aside in terms of conservation. So it really doesn't do anything in actuality to determine what the percentages are between sectors. What it does is it creates a vision for the future and a set-aside.

Dr. Cheuvront: I had thought about, too, George, and it's set up right now is we show that in the commercial; for example, the AsubC, we have everything set at 50 percent, and we have those percentages set the same all the way across for each of the different sectors, but it doesn't necessarily have to be the same, and it doesn't have to be 50/50. It could be different by sector.

Mr. Geiger: And I understand that but the question then comes the 0.5 CC is a combination of CsubC, CsubH, CsubR, but what are those values?

Mr. Boyles: George, I think the idea here is – and I probably didn't express it the right way – the idea here is A – the end of the formula is an allocation rate, the percentage. You can do it in pounds. The idea here is – and I apologize, it's a bunch of stuff to process – the idea here is you give equal weight to catch history as you – the take-home message from this, the way I read it, you give equal weight to catch history and to some vision for the future as determined by the Snapper Grouper Committee.

You know, if you look at the formula, 1minusCsubC minus Cs of R that tells you that everything adds up to one. If you add CsubC, CsubH and CsubH, that a hundred percent. I mean, that's all of the catch. The idea here is to come up with an allocation ratio for each of those three sectors that obviously can't sum the greater than one. You can't away more of the pie than there is available.

Kate and I were having a sidebar. You could probably do this in terms of actual pounds rather than in ratios. I mean, it really kind of depends on how we want to proceed. The idea here is – and, again, there is no pride of authorship here – the idea here is simply do we wish to give equal weight to the past as well as some vision of the future. I really think that's kind of a take-home message here, and we want to give that 40 percent or 60 percent in terms of –

Mr. Geiger: So, then, in fact, when you work down here towards the bottom when it says – it the bottom you give the examples so we are in fact coming up with a de facto – potentially a change in percentage?

Mr. Boyles: If you look at the bottom what I did was if the commercial sector took 80 percent of the catch, if you look at the bottom, the for-hire sector took 15 percent of catch and the recreational sector took the remained, if you populate that, then you have a future allocation – you give the commercial sector 40 percent of the catch on based on catch history plus some portion of the catch as determined by some desired future condition; the same thing for the for-hire; the same thing for the recreational side.

So, in essence, according to this algorithm, this model, you give each sector half of their allocations based on catch history and then the real discussion becomes what becomes those

question marks, what is the vision of the future? And this gets to John's point, I don't know you crosswalk that ACLs and everything else. It was all I could do to get us to this point.

Dr. Cheuvront: I think that was a good example of a way of showing that we're not going to ignore catch history. It's going to be part of the equation of what the allocation is going to be, but it's only part of the equation. Like we said, we can change those weights as long as within each of those groupings it still adds up to one.

Just to change the subject for a second, Bob gave me the meeting minutes from full council for the allocation committee, and that's what you see. I believe everybody's copy is highlighted on the first page, Page 58, and that's where our committee started. This shows the motions and things and how it occurred at full council, and I wanted to make sure was aware of that's what this document is. Okay, John, you wanted to say something.

Mr. Wallace: Yes, just something that Mac and was talking and I'm trying to wrap – I'm a high school graduate and the algebra I took was a little – this is a little bit above it. The combination of A/C and A/R will be equal to the ABC, basically? Okay, and the F will be difference between the ABC either the ACL or the ACT, because that is your vision of – Mac is saying he don't think so, but, you know, that is what it's going to define – the vision of the future is the conservation between ABC and ACL or ACT, whichever one you want to go to.

I mean, that is your difference; that is your vision. I mean, and whether we determine – you know, we can put this in as a recommendation of the – you know, this is our vision of the future and we think it should fit this pattern, but that would be definition that the Snapper Grouper Committee should go by in order to create ACT. Let's say, okay, just round off numbers, let's say just on that you would have the hundred thousand pound ABC.

If we want to go on a 50/50 ratio, let's just go with that one formula, you would have 50,000 pounds that would go to the commercial and 50,000 pounds that would go to the F factor, the conservation. Well, that's going to put your ACT at 50,000 pounds and your conservation measure is the other 50,000 pounds based on this formula, which is – which should in effect be your ACT. The F should equal ACT. Do you all under where I'm going?

Mr. Boyles: John, bear with me. I've kind of moved away from the discussion about conservation as a separate specific allocation.

Ms. Quigley: Okay, one thing to remember – I don't know, Robert, if you agree with me or not, what he has brought is a theoretical model so a new way of perhaps thinking about things, and it could be used as an applied model possibly. If you plug numbers in there for catch history and for – you know, if you had an exact number that you wanted to be caught in the future, but there is also a theoretical component, so I would say don't read too much into it what Robert has put up right now on the board.

What he is suggesting is you don't have to have just catch history to determine allocation and you don't have to have just a future vision or how about combining these two things and providing some sort of weight to those things? What he has proposed implicitly by putting up

the 0.5 is how about half and half, so that's what he is proposing. Beyond that you'd really have to sit down and think with a group of people about how to actually apply this in equation form and plug numbers in, but I think that's what he is proposing is this is a way we can talk about is combining these two goals.

Dr. Cheuvront: Kate, thank you. Again, you're helping to clarify what it is that we're trying to show between the numbers-oriented people and the more conceptual, but I think it really does serve a good model for us in helping us to try to figure out, okay, what are the concepts that we need to consider in trying to figure out how to make an allocation and understanding that theoretically these numbers are pretty fluid.

For example, on catch history, well, somebody has got to decide which part of the catch history are we going to look at and what are the factors that affect catch history. Regulatory actions in the past, that affects catch history and it doesn't matter whether it's commercial or recreational, but if we put some kind of a limitation on the commercial side but not on the recreational side, that's going to give a false impression of what could have been caught. We have to consider those sorts of things in catch history.

When we get to the future, we have decided, well, we can go species by species or whatever it is, but determine what that is going to be. And dividing it up 50/50 or some other percentage that just tells us how much weight do we want to give to catch history versus how we want to see the future, and that's also a sliding factor. It doesn't necessarily have to remain the same for every species that we're considering.

But I think as Robert has really well pointed out is we have three things to considering, and somehow we can use – if we decide by species each of these three components, we can use a potential algorithm like this to help us understand or come up with those figures that we think are going to give us the number for those allocations. Monica.

Ms. Smit-Brunello: Just a question; we can our minds around landings data – or catch history, I guess, once you decide what years to use and all that. I mean, that's quantifiable for the most part, and you can look at it. In terms of future vision, because for our purposes you're saying let's put equal weight, do you have – just for me to start thinking about, do you have an idea of what you're going to use for future vision; or, maybe we don't want to go down that road right now.

Mr. Boyles: I didn't specifically, Monica, because what I did hear I think in earlier discussion and what the council said is that really – and this is keying on something John brought up the last time was that really is the Snapper Grouper Committee's discussion. This is not – and Kate says it so much better than I do, all this does is say we give equal weight to the past as to the future.

I don't want to lead us down the primrose path again, or try to, but I think what this does is if we were to adopt this and if the council were to adopt this; the message coming out of this is we give equal weight to catch history as we give to some desired future condition. What that does, I believe, is that I would submit – I'm not an attorney, but I would submit that we could go, if it were challenged, when it's challenged, we could say, yes, we've talked about history, we've

talked about catch history, we've talked about what has gone on in the fishery, we've accounted for that, but we're also looking down the road, we've looked over the weather rail and we're looking down the road as well.

That's all this does. It's nothing more than that. I think it becomes the prerogative of the Snapper Grouper Committee – and, Mac, I don't mean to punt to you guys, but I think it becomes the Snapper Grouper Committee's purview is that how do we want the future of the future to look.

Dr. Cheuvront: Just to throw in a couple of cents worth here, the beauty of this model is that it could applied to any or all of our fisheries. This could be a comprehensive way to consider allocations.

Mr. Currin: Robert, you clarified one of the questions I had right off the bat, and that was that your expectation would be that the Snapper Grouper Committee would determine values of this Fsub whatever, Fs of X for each of those three fisheries. Given the time constraints the Snapper Grouper Committee is under, I would predict and my advice to the committee would be to, at this point, use nothing but landings and consider it as an interim allocation, and we're going to move forward with that because that's all we have time to do.

I think it's a good model. I'm not quite sure how we'd wrap our hands around estimates of FsubX or Fs of C, H and R. In response to Monica's question, I would have one suggestion to consider as an approach to that. I'm not going to take it and have the Snapper Grouper Committee argue it at this point, but it would perhaps be looking at the most recent three to five years in the fishery as an indicator of a trend in that fishery.

That would be one suggestion that might be looked at or at least one part of what Fs or C, H, and R might contain. That could be modified by vision of the council or any sort of economic data, if those ever become available, which is one of stumbling blocks I think for this committee and the council now. But, the bottom line is my advice to the Snapper Grouper Committee is, if this is going to be this committee's recommendation to the Snapper Grouper Committee, is to look at a range of alternatives based on some period of years of landings history because that's all we have time to do and meet our deadline for 17, I believe.

Mr. Boyles: And, Mac, to that point – and I'm being a little fictitious about punting here – I think one alternative that we might consider is that we give equal weight to catch history over the last twenty years. Let's call that the first part of the equation. The second part of the equation, kind of the future condition, is the committee could say let's look at the last three years and that being some of indication of the way things are normalizing or some specific allocation that seems to be working now.

You know, that formula may go maybe the allocation in the previous twenty years with 80/15/5 and maybe the last three years has been closer to 60/30/10 or 60/20/20, something like that, and then all it is is a matter of simply plug it in and saying this is how we're allocating. So, again, I'm sensitive – you are right the time is of the essence and I don't mean to do this – I don't mean to suggest this as a way of punting, but what I think this does is this potentially allows us as a

council to say we're looking at the past, we're thinking about the future, and the various alternatives then become choosing your time series for catch histories and maybe a shorter time series to represent the latest condition of the fishery for the FsubC or Fs of X. Do you follow what I saying?

Mr. Geiger: Thank you, Mr. Chairman, and I agree entirely with Mac; and recall back when we formed the committee that this is a marathon. This is not sprint to accomplish anything in terms of Amendment16, 17 or 18. This is the long-term vision as to how this council will establish allocations in the future; and we said that all allocations, as we move forward, will be interim allocations.

I believe Mac is entirely right that we need to move forward with interim allocations utilizing catch history, do our business and stay on track with the amendment process. I don't mean to rain on this parade, but we need to discuss this in more detail because, Kate, if you would go back to that original one I asked you not to lose, please. In looking over the weather rail, as Robert referred to it, there is a lot of distance between wind and water in terms of catch history and FV.

And all the detail that Monica went through, the excruciating detail in regard to the national standards what we need to consider in establishing allocation, I think at some point you can use this or expand this formula, but the hard work is going to be using the national standards to determine what the individual allocations by sector are and then being able to plug them into this formula to come out with some concept using conservation or whatever the future value is going to be determined.

But I still believe the hard work is going to be apply all the detail from the national standards in determining what the actual allocations are going to be for each of our fisheries. Because, all this formula does – and correct me if I'm wrong again – it takes existing percentage of allocation and utilizing catch history and some vision of the future and comes out with what that number is going to be, but it in no way changes a percentage allocation among sectors.

Dr. Cheuvront: It can change the allocation among sectors. It certainly would do that based on the factor that you have for the future, whatever you use to calculate F, and the percentage weight that you put between catch history and how much weight you want to put on the future.

Mr. Geiger: But all that does is reduce each sector's allocation. It doesn't reallocate.

Dr. Cheuvront: Well, it can reallocate. It can still reallocate. Mathematically it can still work out to do a reallocation; and, particularly by the more weight that you give to the future, that will do more reallocation. That's the part that would give more reallocation.

Mr. Geiger: But if it's applied equally to both sectors, wouldn't it just change each sector accordingly? So you came up with a total –

Dr. Cheuvront: Not necessarily because the example that Robert gave was, for example, if we used a 20-year time series for a catch history and let's say that the allocation breakdown – and

then this by naturally occurring because there was no formal allocation done – say, 80 percent commercial, 5 percent headboat and 15 percent recreational, but we went with the past three years and we saw a change in that trend; for example, it's now only 60 percent commercial and it's 10 percent headboat and 30 percent recreational, what that would do is it would allow half of what determines how many fish the different groups get is going to be determined by that change that has occurred over time.

Mr. Geiger: But that's still just using catch history to make that determination or changes –

Dr. Cheuvront: But it is; it's using catch history, but it's using two separate time series. It's using the current trend as opposed to a long-term trend, so what happened a long, long time ago, we acknowledge that occurred because that's what we've always been doing in the past is just determining what that long-term time series is and allocate that's what it's going to be. That ignores the future, but the future can be based on what we see happening recently, but we can even still tweak that even more.

We could determine that, you know, this is a trend. If you look over the last couple of years, we see that, well, it may be 60 percent commercial now or 50 commercial or whatever, so it went from 60 percent – excuse me, 80 percent, 70 percent, 60 percent commercial, well, we see this trend that's going on. Let's start that commercial level at 50 percent and put more into the future allocation for recreational, headboat, whatever, or vice versa, however you want to work it out.

So what that does is that gives some additional fish to what we predict the future is going to be, but not everything into the future because nobody can predict the future. So we've got a foot in each camp. We're relying on what we saw happened in the past and what we think might happen in the future, and this is a hybrid way of pulling those two things together to help us come up with what a potential allocation could be.

I mean, Monica, can correct me, but I think that would be a defensible way for the council to take into account what MSA tells us we have to do, plus using our best sound judgment, and we can use even landings history if that's the way we went. We can use anything else we wanted to for the future, but we could have a way of defending that and show that we used some kind of a logical sense to help us decide what those future allocations should be. I think it's doing both things. That, to me, is the beauty of that.

Ms. Smit-Brunello: I had the same question George did, but I think I understand it much better now from your discussion. So, this could change percentages of allocations among various sectors based on two things; one, which catch history series you use, which years; and then, two, and maybe even more so potentially is what you're going to use for the future for that sector of the fishery, and that could shuffle out the numbers differently.

Mr. Boyles: Not to beat a dead horse, but let's say the commercial catch history shows in a species that the commercial fishery is taking 60 percent of the fishery; and the Snapper Grouper Committee, through their discussions and deliberations, said, you know, in the future – the last five years; let's use the time series example, that number has been reduced to 30 percent.

According to this, again, imperfect formula, you get equal weight to what a catch history demonstrates that 60 percent historical average plus maybe the last three years that has been 30 percent and that may be a proxy for some desired future conditions. Let's say you do that, okay. 0.5 times 60 percent is 0.3 and 0.5 times – if the last three years has been 30 percent; 0.5 times 15 percent –

Dr. Cheuvront: It comes out to 15 percent.

Mr. Boyles: It comes out to 15 percent, so you get 30 percent plus 15 percent; that's 45 percent. That becomes your new allocation rather than the historical long-term time series of being 60 percent. That is a reallocation.

Dr. Cheuvront: You mean you now have another 15 percent that goes to the other sectors, and what this is, is it's fluid across all the sectors. If you've got a growing commercial fishery, then in the future you see it's growing and that actually could increase its percentage of the allocation over what happened in the history. So, we're juggling things around based on the past and we can see as the current trend that we would probably get.

I think in this case the Snapper Grouper Committee would have to decide do they think that this trend is going to continue into the future, because this is where you have to apply your knowledge and judgment as council members to make that decision as to whether you think it's going to continue into the future and that helps to determine what the allocations are.

Mr. Currin: Not only that, if you want that trend to continue into the future, then that de facto becomes the council's vision for the future. That may or may not be the case. There may be trends that are occurring now in the fishery partially due to regulatory changes in the past that has forced some of those changes or a growing recreational sector.

Now, that's certainly a trend or an indicator of the future and it shouldn't be ignored. I think we have to be careful. If you use that as your trend setter, then the assumption is that the council agrees that is the way it should go, and that may or may not be the case that's our vision for the future.

Mr. Boyles: And, Mac, in these examples we've talked about using a later or a shorter or more recent time series as being a proxy for that. Monica, I can't get around the fact that anything other than catch history is going to be viewed by some as arbitrary and capricious. Now, I may be completely off my rocker, but, Mac, maybe the Snapper Grouper Committee says – maybe the alternatives' analysis becomes – well, let's look at several different allocation ratios, but let's apply it to this formula or let's populate this model with it, and that becomes your alternatives' analysis.

Monica, I don't know if that would meet the litmus test or not, but let's don't lose sight of the that – and this gets back to George's point – the discussions that we've been talking about are driven by catch history, and I don't know any other way around it that doesn't land us in court trying to defend "arbitrary and capricious".

Ms. Smit-Brunello: Well, I think Robert is right to keep that in mind, and it may land us in court, anyway. I am sure there will be some unhappy people regardless of how you've done it, splitting the baby, I guess. My question is a little bit aside from this. I wasn't at the April meeting and I understand you had a presentation maybe from Jim Waters on a net benefits' analysis, is that correct, that they used I think in the red grouper fishery or they're trying to use it in the Gulf. That would be one way, apart from catch histories, I guess to approach it. Is using a net benefit's analysis just not developed enough so that you wouldn't be able to get the information in time to use that?

Dr. Cheuvront: That's actually Agenda Number 7, to get to what we would need to do to be able to use economic analysis to help us understand this, and basically what we have come up with is a laundry list of data needs that are necessary. When you look at that laundry list, you can see we don't have what we need.

Mr. Geiger: Thank you, Robert, and your long explanation was perfect. Its helps me understand and that was very, very good. I find if you don't speak long, if you let a number of people speak ahead of you, usually your questions are answered. I had a question very similar to Monica's in regard to the economic analysis.

At some point it would seem to me that you could also possibly plug the economic analysis information into this formula, which would be our long-term vision as to how we're going to establish when it becomes available, you modify it, you add it into the formula. The question was, Gregg, is it possible to use a standardized time series or would it be feasible to use a standardized time series across all of our fisheries to plug in for the catch history function of this formula?

Mr. Waugh: I would think you would want to look at it on species-by-species basis to see if there have been dramatic shifts similar to what we've seen in snowy grouper. To me, I think you could make an argument for using a standard set of years, but to me you'd have to analyze what impacts those sets of years have on each species. In other words, was there a dramatic change in proportions of catch within that time series in one species and not in others?

Dr. Cheuvront: Yes, I think that's where the species committee has to come in and use their knowledge to help make those decisions. That was your point?

Mr. Geiger: That was my point.

Ms. Merritt: Well, I just wanted to say that I think that the idea that Robert has come up with makes me more comfortable because I've always found that when you have a decision to make that appears to be subjective – and I think that's the perception we always get on allocation – is that being able to tie it to some analytical form with an algorithm or a mathematical formula is only going to work for us in the long run and help us.

I do want to reiterate – and I think Mac and everybody has brought this up – is to make sure that somewhere in there that we're recognizing that we do have other things that impact all of these, such as looking towards the future that we still have to look at some of the past in order to do