

PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SOUTH ATLANTIC STATE/FEDERAL FISHERIES MANAGEMENT BOARD

The Westin Alexandria
Alexandria, Virginia
August 2, 2016

Approved October 25, 2016

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1. **Approval of Agenda** by Consent (Page 1).
2. **Approval of Proceedings of May 2016** by consent (Page 1).
3. **Move that the South Atlantic Board recommend to the Policy Board the development of a complementary Fishery Management Plan for Cobia; so this would be Option 1 under the plan structure listed** (Page 8). Motion by Michelle Duval; second by Robert Boyles. Motion carried (Page 13).
4. **Move to recommend to the ISFMP policy board that the South Atlantic Board is the appropriate venue to develop the FMP for Cobia** (Page 13). Motion by Robert Boyles; second by Spud Woodward. Motion carried (Page 13).
5. **Motion to adjourn** by Consent (Page 22).

ATTENDANCE

Board Members

Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Doug Brady, NC (GA)
Russ Allen, NJ, proxy for D. Chanda (AA)	Jerry Schill, NC, proxy for Rep. Steinburg (LA)
Tom Fote, NJ (GA)	Michelle Duval, NC, proxy for B. Davis (AA)
John Clark, DE, proxy for D. Saveikis (AA)	Robert Boyles, SC (AA)
Roy Miller, DE (GA)	Malcolm Rhodes, SC (GA)
Craig Pugh, DE, proxy for Rep. Carson (LA)	Patrick Geer, GA, proxy for Rep. Nimmer (LA)
Rachel Dean, MD (GA)	Spud Woodward, GA (AA)
Lynn Fegley, MD, proxy for D. Blazer (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Ed O'Brien, MD, proxy for Del. Stein (LA)	Martin Gary, PRFC
Joe Cimino, VA, proxy for J. Bull (AA)	Wilson Laney, USFWS
Kyle Schick, VA, proxy for Sen. Stuart (LA)	John Carmichael, SAFMC

(AA = Administrative Appointee; GA = Governor Appointee; LA = Legislative Appointee)

Ex-Officio Members

Staff

Toni Kerns

Robert Beal

Guests

Roy Crabtree, NMFS
Dr. Louis Daniel, NC

Andrew Shiels. PA Fish & Boat Comm.

The South Atlantic State/Federal Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, August 2, 2016, and was called to order at 10:04 o'clock a.m. by Chairman Jim Estes.

CALL TO ORDER

CHAIRMAN JIM ESTES: Good morning. I would like to convene the South Atlantic/Federal Fisheries Management Board this morning. My name is Jim Estes; I am the Administrative Proxy from Florida; welcome! I hope we can do some conservation this morning.

APPROVAL OF AGENDA

CHAIRMAN ESTES: We have an agenda. you all should have been given the agenda.

I would like to make an addition to the agenda. When we're discussing cobia management, we would also like to discuss any recommendations that we might have to the South Atlantic Fisheries Management Council on Framework 4. We'll do that during the discussion of cobia. Are there any other suggestions about changes to the agenda?

CHAIRMAN ESTES: Is there any objection to accepting the agenda as amended? Seeing none; the agenda is set.

APPROVAL OF PROCEEDINGS

CHAIRMAN ESTES: We also have the proceedings from our May meeting; and I'm sure that most of you can remember how much fun that was. Are there any suggestions to edit or change the proceedings of the May meeting? Seeing none; are there any objections to accepting those proceedings? Seeing none; the proceedings are accepted.

PUBLIC COMMENT

CHAIRMAN ESTES: Public comment, do we have any members from the public that wish to speak on items that are not on the agenda? Okay, seeing none; we'll go forward.

COMMISSION INVOLVEMENT IN COBIA MANAGEMENT

At our May meeting the Policy Board tasked the staff to create a white paper about cobia management, and I think that we'll have an explanation about that in a few minutes. We have an honorary member who agreed to help work on this issue. Dr. Louis bluegill Daniel is here with us to make a presentation about possible cobia management actions that we might take.

DR. LOUIS B. DANIEL, III: It is a delight to be back in Alexandria and be with you again. I am working for the Commission on a limited basis; putting together the cobia information for you. I'll go through a-- I tried to keep it short and sweet for you, to go through the issues as they pertain to cobia management.

Essentially, these fish range from Nova Scotia to Argentina, I think the Scotian fish were lost; but they are uncommon north of Maryland. We'll talk more about that here shortly. They are an extremely valuable fishery to the for-hire and recreational sector, and they serve primarily as a bycatch in the commercial fishery.

Briefly, the management history, cobia have been managed by the South Atlantic Fishery Management Council through the coastal migratory pelagics FMP since 1982, as a unit stock from the east coast of Florida to New York. Management has been precautionary throughout the time series, with a two-fish limit for commercial and recreational fishermen and a size limit of 33 inches fork-length. The thought was there to be, I think at the time, extremely precautionary on cobia. The primary fishery occurs when they're spawning; so let's be precautionary and preemptive on any potential problems and maintain this fishery as a small fishery.

Amendment 18 did establish allowable catch limits in 2012, and some recent genetics studies indicate two separate populations of cobia; the Gulf group, which is the east coast of Florida and

around the Gulf of Mexico, and the Atlantic migratory group, which you'll see me denote here from here on as AMG cobia, which occur from the Georgia/Florida line north to New York and may occur north of there. We do have some landings records from north of New York.

Further with the management history, Amendment 20B revised catch limits based on the stock assessment. That stock assessment was the SEDAR; Southeast Data Assessment and Review 28, and modified the boundary between the Atlantic and Gulf based on the recent genetic studies. The current management strategy, which you'll go over I think after my presentation, coming out of the South Atlantic is Framework action Amendment 4.

That is currently being developed to address overages of the allowable catch limits by the recreational fisheries of the Atlantic migratory group. To briefly summarize current issues, and probably the primary reason we're here at this particular point. The National Marine Fisheries Service announced a closure to the AMG cobia effective June 20th, of 2016, for exceeding the allowable catch limit in 2015.

The allowable catch limit for our cobia in 2015 was 630,000 pounds. That is based on the stock assessment. Well, landings were 1.5 million pounds; so an extraordinary overage of the recreational ACL for 2015. The closure that was scheduled for June the 20th impacted the fishery throughout the range of the AMG cobia; but impacts were greatest for the outer banks of North Carolina and all the states from Virginia to the northern extent of the range.

Virginia and North Carolina reacted to the closures recently by implementing state-specific regulations to try and lessen the impact of the closures on their specific states. To kind of give you a sense of why this is so important, the recreational fishery occurs primarily from April to October in nearshore and offshore waters.

Based on the MRIP information, about 82 percent of the cobia harvest is reported from in-

state waters. You can see from this graphic that the dominant landings occur during that May/June Wave 3, but there are substantial landings during the July/August Wave. The June 20 closure had a significant impact on the later fisheries that occur along the east coast of our jurisdiction.

Where the fish go from October to April is a good question, and one that I hope we will be able to delve into if we move forward and develop something further on this fishery. The fishery generally begins as fish move nearshore off of Georgia in early spring, and proceeds northwards. Just to give you an idea of where the landings come from, the majority of the recreational landings occurred in North Carolina and Virginia from May through July, during most years.

But you'll notice here that while for North Carolina and Virginia, many years would count for 80 to 90 percent of the total landings, there is variability in those trends on an annual basis. I think particularly to note are the landings from South Carolina, for example in 2007, the landings from Georgia particularly in 2008, and again from South Carolina in 2012. It is variable as the fishery moves south to north. But generally, North Carolina and Virginia take the lion's share of the cobia landings recreationally; at least they have from 2005 to 2015, important to note here that there are no MRIP landings reported north of Virginia.

Just to look at the general trend, recreational landings from 2005 to 2015, it is a pretty variable trend over the time series until this past year, when the recreational ACL was exceeded. You will note here that with a recreational ACL of 630,000 pounds, it would have been exceeded in seven of the last 11 years.

To look at the landings a little more completely, and not to forget our friends in Florida, this is all in your white paper that was distributed in your supplemental material. From 2005 to 2015, these are the landings from Virginia. I include the east coast of Florida to give you an idea of

the magnitude of the landings in that recreational fishery.

The next iteration of this presentation I will have a comparison of the total landings from the AMG cobia and the east coast of Florida, because in putting this together, I noticed they are fairly diphasic in terms of they don't track one another. Some years the AMG cobia will have very high landings and the Florida landings down and vice versa. They don't track one another very well.

What you can see here from the east coast of Florida landings that they do have a significant landing of cobia off the east coast of Florida. Looking at the commercial fishery, again, those trends have shown an increase since 2011. The areas here are down below Georgia/South Carolina, very minor landings.

The Mid-Atlantic States, which is essentially Virginia, and then reported landings from the states of Maryland, New Jersey, New York and Rhode Island also, have reported landings during the time series; not every year north of Virginia do those states have landings, but episodically through that time series, they have reported landings, mostly in the 3 to 400 pound range.

Then for North Carolina you can see the general trend tracks the Mid-Atlantic since 2011, with pretty steadily increasing landings. There was a late season closure in 2014; as the result of going over the ACL for the commercial fishery. A pretty significant overage occurred in 2015; but that information came in so late that we weren't able to react to a closure in 2015. Just a reminder that these closures in the commercial fishery do raise some concerns for discards in a bycatch fishery.

Just briefly, and this is in the white paper, the fishery is primarily a bycatch in the trawl fisheries for king mackerel and other species; as well as a pretty substantive bycatch in the South Atlantic snapper grouper complex fishery, where, when they move offshore after the spawning season, they tend to aggregate around wrecks and reefs and live-bottom areas; where

they are subject to bottom fish fishermen, snapper grouper fishermen.

The same general trend in Florida East Coast commercial landings, they are not included in the AMG cobia quotas and are managed through the Gulf Council portion of the plan. But you can see that general trend in their landings is likewise up over the last five years, well not the last five years. These are the latest, most recent data we had for the Florida landings. But they are seeing an increase in those landings, as well. Further examination into why those landings are increasing the way they are, is something that we would like to look at in the future. Just a basic summary of the stock status, and John Carmichael is here to my left with the South Atlantic.

Between the two of us, I think we can answer any of your questions on the stock status. The most recent assessment was the 2013 cobia benchmark assessment, with data through 2011. While the assessment indicates that the stock is not overfished, and overfishing is not occurring, the assessment does indicate an overall decline in stock biomass.

I pulled out this one figure that I think is pretty pertinent to this discussion, with the SSB over SSB_{msy} ratio, and you can see that from about 1995 to present, there has been a fairly steady decline to where we are approaching the one-to-one ratio of SSB over SSB_{msy}, and if we fall below that one, then we would be considered overfished. We're getting close in that particular graphic.

The assessment does indicate an overall decline in stock biomass. The 2015 recreational landings exceeded the overfishing limit as well as the ACL. The overfishing limit is set at 699,200 pounds. With the landings at about 1.5 million, we basically doubled the overfishing limit in 2015; resulting in at least the council's determination, overfishing for 2015 in the recreational fishery.

There is a new benchmark stock assessment scheduled for 2018 to further look at the trends,

and particularly in this SSB graphic. Just a little more detail on the stock boundaries. The new cobia stock boundaries were established through South Atlantic Council Amendment 20B in 2014, and beginning March the 1st of 2015, the Atlantic migratory group cobia annual catch limits apply from Georgia through New York.

Cobia caught off the east coast of Florida are now counted against the Florida East Coast allocation of the Gulf of Mexico cobia annual catch limit. As was discussed, to continue to look at this stock ID question is that the commission was able to get cobia included in the stock ID workshop in 2017.

Hopefully, by the 2018 stock assessment, we'll have a good handle on the stock boundaries for the stock assessment. There is some chance, based on some of the discussions with the analysts, that there could be some drop down into the state of Florida; but right now the data being used for this is, I think, a study out of South Carolina, where they did have a lot of samples from what is considered the mixing zone, which is right around the Florida/Georgia border.

Based on these issues, concerns, problems, the commission received a letter from the South Atlantic Fishery Management Council requesting that the commission consider cobia management at some level. The ISFMP Board at your May meeting directed staff to develop a white paper to consider options for moving forward.

Based on those discussions and based on a review of the minutes of your board meeting, we put together two potential options for your consideration here today. I'll go through these, and then we can start back, Mr. Chairman, if that satisfies your plan. The first issue is the cobia management plan options to A, develop a management plan structure should the plan be a complementary plan between the Atlantic States and the South Atlantic; Option 1. Option 2 is a joint fishery management plan between the commission and the South Atlantic. Option 3 is an ASMFC exclusive management plan, which

would not include the council. Option 4 is status quo, which means we would continue to just have the South Atlantic Council operate the way they have and simply abide by the closures, or come up with some independent state options to monitor those quotas.

If there are any other options that the board may have in mind that they would bring up during this discussion. Then the second issue that we felt we needed clarification on and direction is the board structure. We basically have three options. There could be others. Option 1 would be to have this board, the South Atlantic State/Federal Fisheries Management Board, handle the issues related to cobia; reaching out to states that have an interest in sitting at this board to discuss these issues, if so desired.

Option 2 would be a standalone Atlantic migratory group cobia board, and Option 3 is an option where we could possibly split out species that are currently within the South Atlantic Board and try to coordinate species that are more alike. One option would be to perhaps include the red drum, black drum and cobia as a single unit in the South Atlantic Board, and maybe have the smaller croaker, spot, speckled trout, Spanish mackerel in a separate group; but that is for the board to discuss.

The short term timeline, you've got a long term, very detailed timeline in the white paper that is in your supplemental materials, but just for the next meeting or two, if the board moves in direction or recommends to the ISFMP Policy Board to move forward with a cobia plan, we would begin developing the PID for your review and approval, hopefully, in November of 2016.

During the period between the annual meeting and the end of January, staff would conduct public meetings and accept public comment. Then at the 2017 board meeting, you would review public comments and direct FMP development. With that, a couple of nice cobias off of Wrightsville Beach, I would be happy to answer any questions you may have.

CHAIRMAN ESTES: Do we have questions, Malcolm?

DR. MALCOLM RHODES: Just one question. Since we've talked about or have been brought up with the east coast of Florida and the Gulf. How is the Gulf stock handled? Is it solely the council, is it commission? Do they have some complementary plan going; just to see how it is handled in our neighboring jurisdiction?

DR. DANIEL: Well, we've got Dr. Roy Crabtree and John Carmichael here, but there is a joint coastal migratory pelagics plan between the South Atlantic and the Gulf. This is consistent with the way that king mackerel are handled, where the king mackerel Gulf are handled in a separate but equal situation as the Atlantic king mackerel.

In the Gulf for Gulf cobia, they have their own special stock assessment and they have specific ACLs and overfishing limits, and they are handled as two separate stocks; two separate species. They are managed the same way as the council manages the Atlantic group cobia.

MR. JOHN CARMICHAEL: In the Gulf it is council. The states aren't involved at this time. I am not aware that they've talked to the Gulf's States Commission about getting involved, so it is strictly council management.

MR. ROBERT BOYLES: Dr. Daniel, thank you for an excellent presentation and excellent work. No surprise, I think that we have, from our perspective in South Carolina, a lot to gain from coordinated management; whatever that coordinated management looks like. I've sat here before at this table and pled my case for the Ben Franklin approach to fisheries management. "If we don't all hang together, we will all certainly hang separately."

With 82 percent of the catch occurring in state waters, I think this is a species that certainly lends itself to interjurisdictional fisheries. Dr. Daniel, thank you for your excellent presentation. A question perhaps for Roy, and

this might be a nuanced question that maybe I should handle separately and offline.

In South Carolina, we manage cobia, again because it primarily has been managed under the Magnuson Act authorities. We adopted by reference the regulations as promulgated under the South Atlantic Council. My question may be for Roy is, can you school us or school me on the differences, the nuances between what we may call a complementary fishery management plan versus a joint fishery management plan.

I guess, let me state my interest at the outset. I certainly think that there are a lot of cross-shelf movements. I certainly think that there is a lot to be had for federal involvement in it, as well. I certainly think that the accountability measures and the ACLs as promulgated under Magnuson need to be part of cobia management.

DR. ROY CRABTREE: Well, I would defer a little bit to staff on some of that. Most of my experience has been with complementary plans, which we've done, and in that case I think the council can operate in their own meeting and go down their path, and then the Atlantic States does theirs.

But if we were to do a true joint plan, then we would need to have joint meetings and we would need to each pass the same motions and those kinds of things; similar to when we do a plan amendment of the coastal migratory pelagics plan and have to meet jointly with the Gulf Council. I think that is the main distinction. I would defer to Toni, if you've got anything to add to that.

MS. TONI KERNS: I think there are a couple of things with the complementary plans oftentimes, like, for example, Atlantic herring we would call that a complementary plan. The quotas are typically set by the council, and then the states then deal with those quotas that are set by the council and there is not a lot of input from the states on those quotas and the ACLs that are attached to those.

I think that there is some flexibility around the accountability measures in the sense of how the states decide to implement measures to meet those quotas within their groupings. With the joint plans Roy is correct, we have to make actions like motions, so then the states have input on those quotas. You are still bound by what the SSC sets for the ABC, but there is input from both groups on the overall quota, so how much you're going to take into account for uncertainty for scientific uncertainty or management uncertainty. With the complementary plans, if the states do decide to do something different than what the council has done, then you have chance that you are going to have different measures, and so then your state and federal permit holders would be fishing on different rules; which sometimes can be problematic, depending on what set of regulations are different.

For example, if you set a different quota, then the federal permit holder would be impacted, or the state permit holder would be impacted. I think those are some of the bigger ones. It does take a little bit longer for us to get through management documents when they are joint plans, because we do need to meet consistently with the other council. I think that is most of the large differences that are there. On Page 8 and 9 of the white paper it does spell out in bullet format what the differences are between the different plans. Hopefully, that is a little bit helpful as well.

CHAIRMAN ESTES: Are there other questions?

MR. JOHN CLARK: Thanks for the presentation, Dr. Daniel. Great to see you back here. I guess I had a question about the data. I mean the increase in the recreational landings between 2014 and 2015 is enormous. Does the MRIP show a corresponding increase in effort? At the same time I saw that the stock assessment actually shows the stock coming down, and yet these catches are just huge.

DR. DANIEL: Well, we certainly don't see anything in the 2015 landings data that would

suggest that there is something wrong in the MRIP landings data stream. We don't think that there is a glitch there. Situations occurred that came together where there were a lot of fish available, and also the fish are trending larger in the fishery, quite a bit larger actually.

The actual numbers of fish probably aren't as reflective as they would be in previous years, when the fish were a little bit smaller. I believe, and this is speaking to some degree anecdotally, because I don't know that the data formally exists. But we are seeing an increase in the number of trips directed towards cobia in the recreational fishery.

But we've also seen sort of a shift in how the fishery operates, to where it has become far more, at least in the Mid-Atlantic region in our southern area region, more of a hunt and fish fishery, as opposed to a bottom fishery. We've seen quite an increase in the development of tackle and baits directed for large cobia.

That increase in interest and effort I think is reflective in some of these landings. But clearly, you can see in years previous it has vacillated around a pretty stable mean. What we'll see this year would only be speculation, but the concern is if we continue to exceed that 630,000 pound allowable catch limit, then we continue to run the risk of an overfished condition.

DR. MICHELLE DUVAL: I'll ask for your indulgence, since I'm wearing a couple of hats here today. I chair the South Atlantic Council, but I'm also here as North Carolina's administrative proxy. There have been a lot of questions from stakeholders with regard to the MRIP data, and we did have some conversation yesterday during the state director's meeting about MRIP estimates.

You know, there has been some concern and there were, with regard to black sea bass and blue fish, final estimates; and we did ask MRIP folks if they could go back and look at if the re-estimations that were used for those species had any impact on cobia. The answer was very little;

I believe it was a drop in something like 28,000 pounds.

That said, I think one of the things that from a council perspective I am interested in exploring are some of the alternative techniques for estimation of harvest that the MRIP staff have been gracious enough to present to the South Atlantic Council's SSC, using things like an annual estimate of catch multiplied by estimates of effort; so that you might be not necessarily getting wave-based estimates, but you might be getting annual estimates that would allow for a smoothing out some of these spikier approaches.

There were multiple approaches that MRIP staff had put forward last fall to our SSC. These were for different species that tend to be rarely intercepted, but I think for a pulse fishery like cobia, some of those might be applicable. We have encouraged NOAA Fisheries MRIP staff to consider development of additional business rules for when those types of techniques might be applied during the MRIP review that has gone on.

I also wanted to follow up on Mr. Boyle's comments with regard to commission involvement in the management of cobia. I think one of the things that has certainly become clearer, if we didn't already know it, is the differences in this fishery up and down the coast. You know Georgia's fishery is different than South Carolina's fishery, is different than North Carolina's fishery, is different than Virginia's fishery.

You know we've just seen in the past few weeks a little girl from Maryland who caught a fish that was half as big again as she was. I think it certainly lends support and rationale for the commission becoming involved in cobia management. I think, and Pat can correct me if I'm wrong, but Georgia's fishery is pretty much a federal waters fishery.

South Carolina has seen a lot of changes in their inshore versus offshore fisheries over the last

seven or eight years. You know in North Carolina itself, we sort of straddle between what Virginia's fishery characteristics are versus what the characteristics are south of us. You know, north of Ocracoke Inlet it is a different fishery, versus south of Ocracoke Inlet.

Then Virginia, of course, has a longer season with a peak that is offset by another wave. I think with the things that we have heard from stakeholders, with regard to having an equal voice or an equal seat at the table, the commission process offers that with every state having an equal vote and an equal voice.

Then one of the other major issues that we've heard has been the ability to react to changing conditions within the fishery, and the commission process allows for a more nimble and flexible response. Certainly, even though the council as you'll hear about, is undertaking a framework amendment, and most folks here are familiar with a framework amendment; its process.

It is a shorter process, but it still requires going through federal rule making; whereas the commission process allows for more rapid changes in regulations. I think for all of those reasons I would certainly advocate for the commission becoming involved in this. Whenever you're ready, Mr. Chairman, I am prepared to make a motion with regard to that.

CHAIRMAN ESTES: Thank you. Let's see if we can exhaust the questions.

MR. JOE CIMINO: I just wanted to make a comment and follow up with what Michelle has just said. I think the South Atlantic Council's framework has exhausted all of their possible management options. I think they've done a great job with what they are putting forward with options for the framework. I'm not sure that that is enough for this fishery, since it is so different state-to-state.

I really think we need to have some decisions made here, especially for the conservation

equivalency that could put the states in a bind with the current framework. I would feel remiss if I didn't thank the council for all they've done so far. This has been a tough year for a lot of us, and I also want to thank Dr. Crabtree's staff. They've been extremely helpful through all of this, and just really open to working with us; but I do believe it belongs here.

DR. CRABTREE: I just wanted to follow up on some of the comments. I think the Fishery Service thinks it is important that the commission take on more of a role in management of this fishery, and I think there is a need for the commission to develop a fishery management plan. I don't think any of us want to complicate this any more than we need to; to achieve our objectives and have a successful fishery.

But I think we do need to insure that the states that have important fisheries for cobia all do have a voice in how the fishery is managed. I think flexibility here is certainly desirable. I think more state involvement here. This is, I think, Louis, 80, 85 percent of the fishery is occurring in state waters; and so this is predominantly a state water fishery.

I think it is appropriate that the states take on a greater role in the management of the fishery. Exactly how we get there, the complementary plan sounds like maybe the most straightforward way to get to what we need to do, but I'm open to other options, as well. But I do think we support the development of a commission plan of some sort; and I think that is necessary to properly manage the fishery.

CHAIRMAN ESTES: If there are no other questions, maybe if we could go backwards about three or four slides here to look at the management options; and then when we get that up there Michelle, if you have a motion, I would appreciate that. Go ahead, Michelle.

DR. DUVAL: I move that the South Atlantic Board recommend to the Policy Board development of a complementary fishery

management plan for cobia; so this would be Option 1 under the plan structure listed.

CHAIRMAN ESTES: Do we have a second? Robert Boyles. Michelle, would you like to expand on that?

DR. DUVAL: I put forward the option for complementary management at this time, because as you've heard here, I think there is a strong rationale for the commission to become involved in this; based on some of the stakeholder concerns with regard to adequate representation, being able to be responsive to each state's management needs. But I think what we've also heard is that stakeholders believe that the actions that have occurred as a result of the federal process have led to the situation that we are in today, and so they want to see the council fix that situation as much as possible. I think maintaining federal involvement at this time is certainly appropriate.

PUBLIC COMMENT

CHAIRMAN ESTES: Before we have any further discussion, we have a member of the public that I think would like to make a comment. Sir, if you come to the microphone and state your name and any affiliation you might have.

MR. JONATHAN FRENCH: Thank you, my name is Jonathan French. I represent a loose collaboration of charterboat captains; tackle shops and just regular recreational anglers from Virginia and North Carolina. I'm probably the stakeholder that Dr. Duval has mentioned expressed most of those concerns.

I am here to ask for this commission to be very patient and not make a recommendation at this time. I think Dr. Daniel; his presentation shows the reason why. I don't know if it is appropriate to ask for the slides to go backwards, but one of the slides mentioned that there is a genetic dividing line at the Florida/Georgia general area.

I believe the exact line claimed is slightly south of the Florida/Georgia state line. We have two

genetic studies, one of which is from South Carolina Department of Natural Resources that say that that is hogwash. It is an example of throughout this process, information has been presented to the public that at best is best and inconsistent, and at worse seems to be downright dishonest; and those issues need to be fixed before additional regulatory bodies come into place.

The first of those studies comes from Texas A & M University. It is peer reviewed and it's published in the North American Journal of Aquaculture that says the cobia sampled from the coastal waters of Virginia, Mississippi and Louisiana were genetically homogeneous; based on essays of microsatellite genotypes and mtDNA haplotypes.

The second study, again, I reference from South Carolina, says that offshore migratory fish are genetically identical throughout Gulf and Atlantic waters. There is no dividing line. However, that study does acknowledge the existence of an anomaly genetically in South Carolina that is a byproduct of a failed stocking effort and aquaculture projects started in 2004 by the state.

I would like to reference specifically from that study; "No fish collected outside of South Carolina were identified as South Carolina stocked fish. Therefore evaluation of hatchery contribution represents the contribution to South Carolina's cobia populations." What that means is that the fish that are the genetic anomaly that were used for the justification for the zone split in Amendment 20B, in the fisheries management plan, those fish don't move.

South Carolina's actions in order to reduce pressure on that localized fishery, I would deem them to be appropriate, but should not be impactful outside of that area. Those were the reasons used to justify the zone split; and the end result was 880,000 pounds of quota that were carved out of the Atlantic management zone and given to East Florida, which is now part of the Gulf management zone.

Those 880,000 pounds was given, even though the average catch in the East Florida for the years 2013 through 2015, was only 427,000 pounds. Essentially, East Florida got double what they normally catch; at least in that three-year period. During the same time period, North Carolina and Virginia by themselves caught 550,000 pounds; yet only 630,000 pounds was carved out of the entire area from the Georgia state line up to New York. That is not fair; that is not equitable, that is a violation at the absolute root; not best science available, not fair and equitable impact, not a fair and equitable impact of the resource.

The result is, even if you accept the MRIP data as accurate, which most of the folks that I try to represent say is absolute malarkey. But even if you accept it as being accurate, you look at the standard deviation of the catch averages for the last ten years, and 2015 is the only year that goes above the standard deviation.

It is one of only three years that go above the appropriate ACL, which is the ACL that includes East Florida; because as I pointed out earlier the genetic rationale for the zone split is not grounded in science. With that being the case, we wouldn't have a crisis. This is a manufactured crisis that, frankly, to use a term that "us dumb folks" are familiar with, because of the recent election cycle, this has been gerrymandered.

I would recommend that this commission wait until South Atlantic conduct a new stock assessment to reconsider some of this other scientific information, and determine whether or not there needs to be any additional management. One other point that was kind of brushed over in Dr. Daniel's presentation is what North Carolina and Virginia have done. That catch average occurred when North Carolina allowed a two-fish per person limit, with fish at 33 inches a piece in 2015.

North Carolina initially dropped to a one-fish limit for this year, and that was only deemed to be worth a couple of additional days of the season, so now North Carolina has gone to a

four-fish boat limit for charter boat anglers, a two-fish boat limit for recreational boat anglers who can only possess a fish on Monday, Wednesday and Saturday; which I regard as a horrible violation of equal protection, and peer anglers can keep one fish per day, all at 37 inches fork-length rather than 33.

There is going to be a significant drop in the catch from those steps. Virginia has had a one-fish per person limit for an extended period of time. That is one of the reasons we regard the population as thriving in the Chesapeake Bay. Virginia has managed carefully and ended up getting punished for it.

Virginia, in response to all this, did not comply with federal law either; however, the commission in Virginia made the decision to drop to a two-fish boat limit, only one fish over 51 inches could be kept, and Virginia anglers are only allowed to use nets. If you factor in those changes, or even if you adopted a one-fish per person limit across the states in the management area, look at the trended data out over ten years.

There is no reason to reasonably assume that if the ACL were set at the 2014 level, where it belongs, with East Florida/Key West as the appropriate dividing line; which is appropriately based on the genetic science available and the tagging data available, that a one-fish per person limit would not produce numbers well beneath the ACL.

We have argued this until we're blue in the face. We have been told by we're wrong, and yet the information presented is at best confusing and misleading; and at worse it feels like we're being lied to. Fisheries management will not work if the public feels like they can't trust the folks around this table and the folks around those councils and commissions as honest dealers. The folks I represent are furious. They're independent, they are not well organized, but they are mad as all get out.

What they observe on a daily basis does not align with the information you have been presented. I regard the presentation that Dr. Daniel just gave to you as dishonest. I hope you all read it closely. I would beg and plead that another hearing is held so we have an opportunity to present this other publically available, peer reviewed, published genetic information; and then you make up your own minds. But don't feed this bull you've been handed. Thank you.

CHAIRMAN ESTES: Thank you for your comments. Do we have any further discussion of the motion on the board?

MR. THOMAS P. FOTE: I really didn't want to comment on this, since New Jersey is a very small player. We have some recreational incidental catches and some commercial catches. But I really am not happy with complementary plans, the same way I'm not happy with joint plans. I mean, the only complementary plan that I've been involved with is winter flounder; and that really works horribly.

As we can put in the commission, we put in a one fish bag limit and a 50 pound trip limit, and GARFO for some unknown reason allows 5,000 pound trip limits on our boats, commercial that fish in federal waters; which meant that in four or five trips they would catch more fish than our commercial fishermen in state waters would catch in 30 years, and the same thing with the recreational.

They didn't ask for our guidance in things like that. I'm also concerned -- I didn't see the PEs on the recreational data. I was wondering, because I'm not that familiar with the fishery. When the red snapper fishery was constrained, did that basically put a lot more effort on the cobia fishery? That is the question that hasn't been answered; because I can see that happen.

When we started losing summer flounder and regulations went where they had to do 20 to 1 to catch and release. Then it put more pressure on, and more people became striped bass fishermen. That's my other concern here. I'm

just trying to look at the data that I'm not that familiar with. My concern is I have a problem with a complementary plan.

MR. BOYLES: I support the motion, obviously having seconded it. I remind the board that in South Carolina, our state waters and what is now known as the Southern Cobia Management Zone closed May the 1st, to protect what we believe to be is a spawning aggregation. Because we adopt federal regulations by reference, South Carolina anglers have not had access to the cobia fishery since June the 20th of this year.

Eighty percent of the catch caught in state waters, I think this is a species that screams for interjurisdictional management. With respect to our fishermen and our anglers to points north, their commissions, which we respect, those anglers in Virginia and North Carolina have access to the cobia fishery. My anglers in South Carolina are asking me why that is. I support the motion and think it is something that we should move forward to the Policy Board.

MR. ADAM NOWALSKY: Can we get any comment here today about the question of the DNA demarcation line? We heard that the gentlemen and those groups involved have gotten a response as to why they're wrong. Can we hear that on the record here today?

CHAIRMAN ESTES: Dr. Carmichael.

MR. CARMICHAEL: The genetics information that was available at the time the assessment was done was studied in quite a bit of detail; and then the samples by South Carolina were during the assessment process where there was some additional sampling done for them as well. Now the study that Mr. French sited by Dr. Gold that was done had a relatively small sample size. They looked at the Virginia offshore, they looked at Mississippi, Louisiana and Taiwan versus the Darden study.

The South Carolina study looked at inshore/offshore of Virginia, North Carolina and South Carolina, all of them inshore/offshore.

There were kind of two different purposes of the studies. The South Carolina and Darden study was to try and define the stock boundaries as they were; and really started out in the case of South Carolina to try and understand the inshore components, you know, like the Port Royal population, whether that was its own separate population.

What was happening to the stocked fish? Then as the result of those efforts began to realize that there were multiple stock units along the coast that had various degrees of mixing and interactions, and then looked closer at what the relationship was to the Florida stock and the Gulf stock, and maybe where those lines were.

The Gold Study that was sited came along later and was really geared toward aquaculture and trying to understand relationships between different stocks. That is why it included Taiwan. One of the things that I found interesting about that is that the Gold Study that was sited used Virginia offshore. They had 35 fish, and they had some difficulties in telling whether or not those were truly different; distinct from say the fish in the Gulf of Mexico where they studied.

One of the problems that certainly that raises is that the Darden Study that was done in '08 and '09, and then added more stocks in 2012; really made an effort to collect the fish when the Virginia inshore fish were inshore. Because what they realized is sometimes those inshore stocks were mixing with this offshore component; particularly off of North Carolina and Virginia.

The Darden Studies for example, couldn't establish the North Carolina fish as being distinct from either the fish in the Virginia inshore or the fish that were farther south in the South Atlantic. There is a mixing that goes on, and you guys work with striped bass and other stuff; you all are well aware of all that kind of stuff that was going on sort of off of the mouth of the Chesapeake Bay and stuff.

Of course, genetics being such as they are that is not always the be all and end all, and there are sample size issues and trying to truly understand

what a distinct, functioning, productive population unit is. When these stock boundaries were drawn for the assessment, they took all that into account. They realized that it was difficult to draw a line on the southern boundary; which is the case with many of our stocks, and they recommended a pragmatic choice of drawing a line at the Georgia/Florida boundary. I think we know in terms of dealing with datasets and things of that nature in regulations, it is often if you can go to a boundary that exists and you don't have clear distinction as to whether it should maybe be 150 miles north or south of that. It is going to be much more efficient to use that existing boundary. Now, of course, that has raised a lot of questions as we've looked into that and as Louis mentioned, we're going to have a stock ID workshop coming up in late 2017. Cobia is at the top of that list and will absolutely be considered in preparation for the next assessment.

Florida FWC is looking into this now. They're doing some tagging and they're trying to look at movements and other things; to really get better resolution of that Florida component, to try to decide where should the line be? Is it possible that the South Atlantic stock that we call the Atlantic stock should go down to maybe Daytona Beach, as opposed to being at the line?

The reality was there weren't a lot of studies of fish in that area. There weren't a lot of samples of fish in that area when this was done for the last assessment with the data through 2012. There is a lot going on now, and I would say this will definitely be looked at in the next assessment. There may be more genetic studies perhaps, or more samples that come to light when we get around to the next assessment; and that will all be looked at.

Our thought is to look at this population and try to decide, what are the functioning population units? Is there a Chesapeake Bay stock that should be considered similar to the Port Royal stock? Perhaps, and if that is the case, then I would think the commission involvement in the

management would certainly become an even stronger position.

DR. DUVAL: Since I made the motion I am obviously in support of it. I did just want to follow up on John's response to Adam's question. I don't believe the Gold Paper was available at the time that the data workshop for this species occurred, so there has got to be a deadline for information to be considered in a data workshop for a species to be assessed.

That information came to light afterward. It certainly has played into the council's request that cobia be at the top of the list for this stock ID workshop that is occurring. I think, if it were up to the council, we would keep all stock boundaries at the nice, neat jurisdictional boundaries that we have between the South Atlantic and the Mid-Atlantic and between the Gulf and the South Atlantic.

Unfortunately it doesn't always work that way. The council has had to respond on many occasions to these designations of biological stock boundaries. We have one, an action that is going through right now for king mackerel where the mixing zone was thought to be pretty much most of the east coast of the Florida Peninsula and part of the way around the west coast of the Florida Peninsula.

The most recent stock assessment for king mackerel has determined that the mixing zone between the Gulf and Atlantic stocks is actually now centered around the Florida Keys. We are at the whim of the science to some extent, but we are trying to be as responsive as possible to the very valid concerns that stakeholders have brought forth on this.

CHAIRMAN ESTES: Unless I see further interest in discussion, I will read the motion. Move the South Atlantic Board recommend to the Policy Board for the development of a complementary fishery management plan for cobia. Motion by Dr. Duval and seconded by Mr. Boyles, I'll give you just a moment to talk to each other, and then we will ask for a vote. Okay, all of those in

favor of the motion as read; please raise your right hand. All those opposed, like sign, abstentions, null votes; motion passes. Okay, the next agenda item is; excuse me, where did Dr. Daniel go?

DR. DANIEL: I'm right here.

CHAIRMAN ESTES: I'm sorry; we have another part to this.

BOARD STRUCTURE OPTIONS

DR. DANIEL: Yes, if you go back to the presentation and we can get there. The next slide talks about the board structure options, Mr. Chairman.

MR. BOYLES: I would make a motion that we recommend to the ISFMP Policy Board that the South Atlantic State/Federal Fisheries Management Board be the appropriate venue for development of a cobia interstate fishery management plan.

CHAIRMAN ESTES: Is there a second? Spud.

DR. DUVAL: I'm supportive of this motion. I struggled with, what is the best approach here? I think that if current situations are any indicator, it is highly likely that harvest of cobia north of Virginia is probably going to increase down the road. I think it is appropriate that the other states that are currently on the board have the opportunity to participate in the development of a fishery management plan.

CHAIRMAN ESTES: Any further discussion of this issue? As soon as it is on the board we'll see what we're doing. Move to recommend to the policy board that the South Atlantic Board is the appropriate venue to develop the FMP for cobia. Motion by Mr. Boyles and seconded by Mr. Woodward. **Is there any objection to this motion? Seeing none; it passes unanimously.**

FRAMEWORK 4 FOR COBIA

Now, Toni wants to talk a little bit about Framework 4 for cobia.

MS. KERNS: We had a request from the South Atlantic Council to give some recommendations or comments on their Framework 4; as Michelle said that they are undergoing management action that looks at cobia. Framework 4 is just addressing the Atlantic migratory group for cobia within the document.

The document is considering changes to insure longer future seasons and allow fair access to cobia for fishermen in all states. The public comment will go through September, which is when their council meeting is, to address this issue. If we have written comments that get in by August 19, they will be a part of the meeting materials; but they will accept comments after that timeframe.

The actions that are in the document include recreational harvest limits, the bag and vessel limits modifying the recreational minimum size, modifying the accountability measures for the recreational fishery, and then establishing a commercial trip limit for Atlantic cobia. There is also action within this document to look at the recreational fishing year.

The council was given guidance after the document was put out that they have to do an amendment in order to do this, but they are still seeking comment on the fishing year; just in case they decide to change the actual season through management action. Again, like I said, it is just looking at the Atlantic migratory group, so this is the management from Georgia northward. The current limits for federal waters are 33 inches and two fish per person per day. All of the management scenarios and the impacts of those scenarios are based off of these coastwide measures; not based on the state specific measures that have been put in place recently by some of the states.

Skip through some of these slides just in the interest of time. First is looking at modifying the recreational management measures for cobia. There are a couple of things that we are looking at here. First is looking at the possession limit. There are alternatives to not modify or to have a

one fish per person per day, and that is the preferred alternative.

There is also looking at a vessel limit. That vessel limit has options ranging from one to six fish per vessel per day. The preferred alternative is three fish per vessel per day. In addition, they are looking at modifying the size limit for recreational harvest. The current is 33 inches. The document looks at modifying anywhere from 33 to 50 inches. The preferred alternative is 36 inches within the document.

This figure here shows what the preferred alternatives would get you, in terms of how much season you would have; and remember that this is a coastwide measure comparison, and it assumes the fishing date start would be January 1. Those two preferred alternatives would pull the season through almost the end of July. It is predicted that it would go through July 20th.

Next is looking at modifying the recreational fishing year for Atlantic cobia. Again, this action would actually have to be done through an amendment. But 1 is to not modify. The preferred alternative is to have the fishing year be from May 1st through April 30th. Alternative 3 would be a June 1st through May 31st season, and the last alternative is an April 1st through March 31st season.

This figure here shows the recreational landings by month, and where you see the spikes in the landings occurring is mostly March through September/October, for the waves in MRIP. I am going to skip through these tables, Max and we're going straight to the accountability measures. Then looking at how the council is adjusting, modifying their accountability measures.

The current accountability measure for cobia has the recreational ACL reduced by the total overage in the next year. That's based on the most recent three years of data, so you do some averaging out to determine how much of the overage has to be taken out of the ACL in the

following year. In the commercial fishery the council closes harvest when the quota has been met, and if any overages occur, those quotas come out of the next year's quota. Michelle is correcting me, and I asked her to do this.

DR. DUVAL: Just a quick correction on the recreational side of things. The current accountability measure requires a shortened season the following year if the recreational annual catch limits and the total annual catch limit; so recreational and commercial combined, is exceeded. The length of the season will be reduced the following fishing year. If the stock is overfished, which cobia is not, then you would also have a reduction in the annual catch limit. Right now, we're just under a situation of having had a reduced season.

MS. KERNS: The preferred alternative for making changes to the accountability measure is that if the recreational landings exceed the recreational ACL, landings would be monitored for a persistent in the increase in landings. There would be a reduction in the length of the season to insure that the recreational landings met the ACT; but are not exceeding the ACL in the next year.

This would be based on one year of data, not using the averaging that is in the current accountability measure. The next option is to look at reducing the recreational ACL in the following year, similar to what is in the current measures but it would be based on the one year of data, not the three year.

Lastly, is looking at having in-season closures. It gives the ability to close the recreational sector for the remainder of the fishing year if the ACL has been met or is projected to have been met. Then lastly is to modify the recreational vessel limit for the following fishing year, to insure that the recreational landings meet the ACT but don't exceed the ACL. It is based on the one year, as well.

For all of these recreational accountability measures, you can see that some of the big

change would be instead of using the three-year average, you would use the one year. Just note that the council could use more than one of these accountability measures at a time, in order to ensure that there wouldn't be an overage in the following year.

Then lastly is to look at potentially establishing a commercial trip limit for cobia. The current trip limit is two fish per person per day. There is an alternative to establish a commercial trip limit of two person per day, and the trip would decrease to one fish when 75 percent of the commercial ACL had been met.

Then another is to establish a six fish per person vessel per day, and the trip limit would decrease to three fish per vessel per day when 75 percent of the ACL had been met. Lastly is to look at two fish per person per day with no more than six fish per vessel per day; and the trip limit would decrease to one fish per person per day, with no more than three per vessel per day when 75 percent of the ACL has been met.

This is a summary of the estimated month when the actual Atlantic cobia commercial landings reach 75 percent of the commercial ACL, and the current commercial ACL of 50,000 pounds. You can see that in the most recent year, that would have been in July, when 75 percent was met and then when it actually hit the ACL was August. That is all.

I think that we can either do one of two things here, Mr. Chairman, is that we can either get just a general consensus that the board wants to comment; and then those comments can come back to me and then we can draft a letter and send it back to the board for their review, or we can give the comments here today and then send the letter back to the board.

CHAIRMAN ESTES: First of all, so what is the will of the group? Do we want to make comments on this?

MR. NOWALSKY: I won't be cobia specific, but I will draw on the lessons learned with

recreational management in conjunction with the Mid-Atlantic with summer flounder, black sea bass and scup. Having gone through that at the council level, one of the early iterations of accountability measures included in-season closure authority, and that has since been taken out and deemed just wasn't practicable. I would recommend that same course of action for recreational fisheries; including cobia, unless somebody can make some very clear case why the recreational cobia fishery is that much different than other recreational fisheries.

I would also draw on our experience in the variability inter-annually of the MRIP data and the danger of responding to a single year's worth of data, and some type of multiyear. Currently, we're using a three-year-rolling average at the council level. I would encourage the board to interact with the council, and recommend a similar course of action to reduce that inter-annual variability

DR. DUVAL: Thank you, Adam, very much. I appreciate those comments. I think the in-season closure option is in there because it is sort of consistent with what we have for some of the accountability measures for some of our other species; but we actually don't have in-season closures for recreational cobia right now, specifically for the very reasons that you've cited.

It is in there as a reasonable alternative for public comment. I think, with regard to the three-year-moving average that is what we have currently, and that three-year-moving average resets in the year that a new ACL is rendered from a stock assessment. That is the situation that we had in 2015. We got a new annual catch limit, so the three-year-moving average started again with 2015.

You were only comparing 2015 landings with the 2015 ACL. If we maintain that three-year-moving average, anglers are going to continue to be penalized for the next two years by having to include that 1.5 million pound spike in the following two years. I just wanted to provide

some rationale for why the council was looking at moving to a one-year comparison, so that if for 2016 harvest has been constrained to the limit. You would only be comparing 2016 landings to a 2016 ACL.

You would not be penalizing anglers by inclusion of that 2015 spike in the three-year-moving average. I think the other thing with the accountability measures was the council was looking at trying to not have some type of season closure by inclusion of the option that allows for a reduction in the vessel limit as a potential option; to be used possibly in combination with a shortened season, but to try to offset any shortened season that might need to occur. I just wanted to provide some context for some of those options in there.

CHAIRMAN ESTES: Obviously, each state can provide comments to the council as they see fit. I think the question before us is do we want, as the commission, do we want to provide comments on this Framework 4?

MR. BOYLES: I'm not sure we could get consensus on what to say, and so my sense is let's just look at this, at commenting individually. Again, I think that is one of the challenges we have; in terms of moving the interstate management. We don't have that yet. I wouldn't expect my views on cobia or South Carolina's views on cobia would be congruent with those of Virginia necessarily, and so I think that would be a futile exercise. I'd recommend we just move on.

MR. CIMINO: I agree with that. I just want to reiterate that I'm glad to see all the work that the council put into this, and in bringing so many options forward; although I think it would be very difficult for us to have consensus on all of them right now. There was an obvious realization by everyone that there needed to be more options within the accountability measures, and I think this is a big step forward for that.

DR. DUVAL: Just one final thought. I agree with Robert, but if there are folks, like Adam offered some very constructive comments. I think if there are folks sitting around the table who do have specific thoughts that they may want to provide to Toni, and Toni could certainly just compile. I mean, recognizing that this isn't consensus, but certainly any constructive criticism of what's in the document would be appreciated by any individuals around the table who chose to do so.

CHAIRMAN ESTES: Is everybody all right with that approach, send comments to Toni that she can compile? Okay, it looks like that is what we're going to do. It is now lunchtime. We obviously can't get done in the next five minutes. Let's break until about 12:30? It's 12:20.

MS. KERNS: We may have Jeff start giving his presentation on sort of what the red drum working group is doing while you guys are eating, and then by the time you're done eating, you can start asking him questions.

(Whereupon a recess was taken.)

RED DRUM WORKING GROUP REPORT

MR. JEFF J. KIPP: I'll be giving an update on the red drum tasks that this board tasked the Red Drum Technical Committee and Stock Assessment Subcommittee with at the May meeting. Just to refresh your memory, the tasks were to look at the appropriateness of the current biological reference points for red drum; which are spawning potential ratios.

Similar to that, look at F-based reference points and the appropriateness of those for just a juvenile-based-F reference point. Evaluate the validity of age-based models for red drum, given data limitations and the life history of this species. Conduct continuity runs of the statistical catch-at-age model that was developed for SEDAR 18, the previous benchmark assessment, and to evaluate the tag return rates and the tag recapture data as it is used in the stock synthesis models.

Just a summary of the meetings that we've had since the May meeting, we did have a conference call with the commissioners to clarify some of the questions we had on the tasks; and sort of what the goals of the tasks were. We've had a series of conference calls and webinars with the Technical Committee and Stock Assessment Subcommittee to go over these tasks.

We do have a webinar planned for the week of August 15th. Also, where we'll get most of our in-person work and discussions done is at an in-person meeting at the Fall TC week, which is September 12th through the 16th, and we don't have that to be determined, the exact date and time for that meeting.

I'll spare the full language here, just in the matter of time, but the first was biological reference points and evaluating the appropriateness of spawning potential ratios for red drum, and whether or not the 30 percent threshold and 40 percent target are suitable goals for red drum. The progress to date for this task -- we started out and felt that it would be useful to go summarize the theory and use of spawning potential ratios as reference points; and how that relates to red drum and their life history. That was provided in the summary in meeting materials. We also did discuss that an overfished reference point is still contingent on spawning stock biomass estimates out of the models; whether that be the stock-synthesis models in the current assessment or, as I'll get to, the catch-at-age model that was used in SEDAR 18.

It was noted that there is the need for some additional information in addition to these F-based reference points, especially if we are lacking an SSB overfished reference point. The group kind of centered around the need for a recruitment reference point likely derived from an index-based survey under a stoplight framework or a traffic light framework as you may recognize, to supplement the F-based reference points; whether those be the

spawning potential ratios, or we are tasked also at looking at just juvenile-F reference points.

Moving forward, we are currently working also on some simulations of looking at the red drum stock, fished to an equilibrium state under different spawning potential ratios, and how that will impact recruitment in the long term to help inform the group's final decision on the SPR reference points for red drum.

The ultimate goal of that will be the final recommendation on SPR reference points and the appropriate threshold and targets for both stocks. Also, to supplement that, as I mentioned, we will provide a recommendation for an index-based-recruitment reference point. For the F-based reference point this was to look at an F-based reference point strictly for the juvenile harvest. We later did confirm on our call with some of the commissioners that that harvest is also to include the assumed B2 mortality of the fish that are discarded in the recreational fishery.

What the group has done here, they've evaluated the relationship between the current overfishing reference point SPR, and juvenile fishing mortality estimates, and also developed a list of pros and cons or advantages and disadvantages of using a juvenile F-based reference point for management of the red drum stocks.

These two figures here just show that evaluation of the relationship between the juvenile fishing mortality estimates and SPR. On the left figure for the southern stock and the right figure for the northern stock, the SPR estimates out of the stock synthesis model are on the Y axis and on the X axis are the fishing mortality estimates for age 0-5 fish.

You can see that there is a tight relationship between those two measures of fishing mortality, but one of the issues that we are currently debating for this is similar to the issues for spawning potential ratios and escapement that have been discussed in the past; and that is what is the appropriate level or reference point

of fishing mortality for this type of metric to manage the stock on.

Moving forward with that in mind, again, we will be having discussions at our in-person meeting, but the final product for this task is a final recommendation on the appropriateness of a juvenile F-based reference point; and if it is deemed appropriate to provide a recommendation for what that reference point is.

As I mentioned before, the group does feel that there needs to be this supplemental index-based recruitment type reference point to supplement any type of fishing mortality reference point. The third task was to evaluate the validity of age-based models for red drum, given some of the data limitations for the species, and also the life history of that species. What the group has done here is we've summarized the potential concerns about data limitations for age-structured models for red drum. We did discuss some other types of models; most notably a biomass dynamics model or surplus-production-type model, and the TC and SAS do recommend against any type of this as inappropriate for red drum.

Moving forward, the product right now is we have coming for this task is a description of the potential implications that the data limitations that are currently in place for red drum could have on age-structured model estimates. I will note that the TC and SAS on our calls have struggled the most with this task and what the goal of this task is.

If what I've presented here is kind of what we see as the final product coming forward for this task is agreeable amongst the board, then we'll keep moving forward on that. But if there is feedback on kind of additional information or thoughts on what the board would like to see to address this task, we are kind of seeking that today.

The fourth task here is updated continuity runs of the catch-at-age model that was used in SEDAR 18. If you recall the presentation of the assessment at the May meeting, there are some

pretty major differences between the estimates out of SEDAR 18 and the new stock synthesis models that were put forth in the most recent assessment.

What we spent most of our time working on for this task is just updating the model inputs to align them as closely as possible to the inputs going into the stock-synthesis-3 models, for the sake of comparing those results more closely and from the updated continuity models through 2013.

I just made a note here that the tag recapture components will be unchanged from SEDAR 18. The group views this as a major task that would not be able to be accomplished before the annual meeting when the board would like to review the work on all these tasks. Moving forward, once those models are run, we will put together a comparison of the catch-at-age model estimates and the stock-synthesis model estimates, and we'll provide a description of those discrepancies and the likely reasons for those discrepancies.

The Stock Assessment Subcommittee will provide a final recommendation on the utility of that catch-at-age model that was used in SEDAR 18 for management advice and the caveats that go with that recommendation. But I do want to note here that the group sees the primary goal of this task in comparing what the implications are from switching from the old catch-at model to the stock-synthesis model.

If the board would like to consider the catch-at-age model as a model for management advice, there would likely need to be additional work to be done following the annual meeting. The group believes that that would need a peer review of that model; because there would be some additional data streams going into the model and likely some modifications to the model, relative to how it was configured for SEDAR 18.

The last task was to evaluate the tag return rates that are used in the stock synthesis model, and

the tag recapture data and make a recommendation if any changes should be made, on how that is incorporated in the stock synthesis models. For the southern stock synthesis model, there were two sensitivity runs done, one with a lower reporting rate and one with a higher reporting rate; 60 percent reporting rate was the higher value, and an 18 percent for a lower value. For the northern model there was a likelihood profile conducted over several fixed values for the recreational harvest fleet reporting rate.

These are just some figures to show the preliminary results of those analyses. In the upper left hand corner is for the southern model, and on the Y axis is the static SPR estimates out of the stock-synthesis model over the time series. The red line is the sensitivity run with the southern model with the reporting rate fixed at 60 percent.

When that is allowed to be estimated within the model, it is estimated at about 30 percent, so it is about doubling the reporting rate as it is estimated in that model. You can see that those estimates fall very similar to the SEDAR 18 SPR estimates, which are the green-dashed line. The black line is the base-southern-stock-synthesis model, and the SPR estimates out of that model, the black-dash line is the stock synthesis model without the tag recapture data included; and you can see it has a little effect on the overall SPR estimates.

The blue line is the sensitivity run with the reporting rate fixed at 18 percent. You can see that the SPR does decrease when fixing that value at a lower rate than what it's estimated in the base model. In the lower right hand corner is the likelihood profile done for the northern model, with the change in the likelihood on the Y axis and the recreational harvest reporting rate on the X axis.

This was profiled over fixed values from 10 percent all the way up to 95 percent. If you recall, that model was estimating a reporting rate around 10 percent. What we're looking for

here in this figure is just a smooth convex shape that comes to a minimum point at the best estimate out of the model.

As you can see here, that is not what we're seeing. This model, when the reporting rate is fixed, estimates a similar solution up to about a reporting rate of 50 percent, and at that point the model finds a very different solution and jumps to that solution instead of a smooth kind of transition to that as you increase the reporting rate. This is indicative of some stability issues within the model when that tag recapture data is included and the reporting rate is fixed.

Moving forward, another idea and thought that the group had and is looking into currently is evaluating the tag recapture data that was used in the stock synthesis model; but in standalone software, most notably the MARK program which is used to look at tag recapture data to get a feel for what that model would estimate from the tag recapture data.

Given a similar reporting rate that is being estimated in the stock synthesis model, that will help us inform how that stock synthesis model is estimating those tag recapture parameters.

Then from that work we'll come up with a final recommendation on how to treat the tag recapture data in the stock synthesis models, and if there are any changes that need to be made relative to how they are presented in the assessment at the May meeting. That is just a quick summary on the work we've been doing for these tasks, and if there are any questions, I can take those now.

CHAIRMAN ESTES: Questions? Spud.

MR. A. G. "SPUD" WOODWARD: Thank you, Jeff, and I certainly want to extend my appreciation to the hard work that you and everybody else has been doing on our behalf. This one is a challenge, and I know everybody is busy. We certainly appreciate the attention to detail. A question that I have been asked is whether there would be any value to doing an SS3 run with the

data from the previous statistical catch-at-age model.

Would that be informative in any manner, because I think one of the things we're struggling with is; is what we're seeing as a model output a function of the inputs or is it the methodology? That's a question I've been asked is whether there would be some value to doing that.

MR. KIPP: We did try and address that as closely as we could with some sensitivity runs. In the assessment there was what we kind of called our catch-at-age alternative model runs. Those were where we did go back and we used the input data as closely as we could from SEDAR 18, within stock synthesis; and looked at the model results from that model relative to the base models.

The model results were very similar. That was a sensitivity that we did look at, but it didn't have a major impact on the model; even though we were looking at an age structure of 0-6 plus, which was comparable to what was looked at in SEDAR 18. What our take home from that was that was not a major implication in how we are making the transition from the SEDAR 18 catch-at-age model to the stock-synthesis model.

MR. WOODWARD: Also, on the task related to the validity of age-based models, I think at least personally what I'm looking for there is that we know we have data source limitations that are unavoidable and very difficult to mitigate, because of management measures and ontogenetic shifts and habitat preferences of the fish, out migration into the ocean; a variety of things that we've been plagued with since we've been trying to do quantitative assessments of this species.

What I was looking for was just a very pragmatic assessment. Given all those limitations and the uncertainties that come along with trying to fill the empty spaces, is an age-based model the only choice we have? I see that there has been some analysis of alternatives that were rejected.

But I think the thing that is troubling us is that we continue to struggle to fill in the empty boxes.

When you've got cohort recruits to the fishery, you basically get to quantify its abundance effectively for a couple three years, and then it's gone where you can't really get to it. Even with our best efforts to assess the adult stock, we still end up with fragmented data. Is there something else, or is this what we're stuck with?

MR. KIPP: I think we are on the same page as far as what we're providing and putting forth to address this task, which is a more detailed description of what those data limitations are, and how those could potentially affect model estimates from a model structure that we used in stock synthesis. But we will also include our thoughts and recommendations on other model types; in addition to the age-based models that are currently used.

CHAIRMAN ESTES: Any other questions? Hearing none; I guess there is more to come. We'll have more of this information when we meet up north in the end of October. If you are ready, Jeff, we can talk about the progress on the spot and croaker – oh, nope.

MS. KERNS: I just wanted to reiterate what Jeff had talked about in terms of moving forward with the different model types, and that if we get to at the annual meeting the point where the board wants to utilize information; that some of these models may require peer review for us to use it for management. I just want to make sure that that would mean that we couldn't move forward until after we had that peer review. I just want to make sure that everybody is clear on that.

CHAIRMAN ESTES: Any questions or issues with that?

MS. LYNN FEGLEY: Thank you, Toni. That was on my mind. It sounds like if, in October, the board decides to move forward with outputs from the statistical catch-at-age that it may need a peer review. I just wonder, for clarification, would

that assessment then take the place -- What are we dealing with at that point? Are we dealing with two peer-reviewed assessments that we're considering in tandem, or are we considering the one with more recent science than the other?

MS. KERNS: I'm going to toss that question to my good friend, Pat Campfield, to answer.

MR. PATRICK A. CAMPFIELD: Thanks very much. My suggestion would be that you put together the whole package for peer review. Given the evolution of the red drum stock assessment models that we've gone through from SEDAR 18 to present, and possibly an additional type of model, you would want to put forward the whole package.

MR. BOYLES: Not a question, just a comment. Our trammel net surveys are suggesting a real issue. We are not getting year ones showing up in out years. We have strong interest in South Carolina to make some management adjustments. I find myself in this rather precarious position of wanting to be informed by the stock assessment.

I appreciate what Toni offered in terms of, if we have other questions this might just push this further and further out. I will just put a marker from our perspective. We have reason to be concerned in South Carolina with what we're seeing in our trammel net survey. We have some constituents who are very concerned about it.

I'm flummoxed in terms of a potential management response when our release rate is reported at somewhere north of 80 percent. It's got me in a little quandary, so I would just urge us to get it right to the degree we can. I'll echo Spud's comments. Jeff, to you and to all the members of the Technical Committee and the Stock Assessment Subcommittee, I appreciate your effort to this. But we want to get it right, but just know for the board that we've got some strong interest from South Carolina to make some management changes.

CHAIRMAN ESTES: I would also like to point out that although we want to get it right, the more that we task this group with doing things, there is an issue of funding and an issue of time. Therefore, the more things that we drag this out, the longer it is, there are going to be fewer things that we can do for the other species. I think we need to be mindful of that, also. Are there any other questions before we go on to the next agenda item? Seeing none; Jeff it is still your show, I guess.

PROGRESS REPORT ON THE SPOT AND ATLANTIC CROAKER STOCK ASSESSMENTS

MR. KIPP: Yes, I just have a quick update for the board on the progress of the spot and Atlantic croaker stock assessments that are currently underway. We do have our second stock assessment workshop scheduled for next week; it is Tuesday through Thursday at the commission's offices in Arlington. The bulk of that meeting will be to review our base models for both species and wrap up the assessment work at that meeting; and the plan is to then finalize the reports following that meeting and go to peer review, likely sometime in November.

For the Atlantic croaker assessment, the primary model right now is a stock-synthesis model, and for spot, we're looking at two modeling approaches, a surplus-production model and a two-staged-catch-survey analysis. Those will be the models that we're reviewing next week and moving forward with. If there are any questions on those assessments, I can take those now, as well.

CONSIDER 2015 FISHERY MANAGEMENT PLAN REVIEW AND STATE COMPLIANCE FOR RED DRUM AND ATLANTIC CROAKER

CHAIRMAN ESTES: Any questions? **Our next agenda was approval of fishery management plan reviews. Toni suggested, and I think it's a good idea, that we do this via e-mail; just because of the time that it is taking. Are there any objections to approval of the Atlantic croaker and red drum plan reviews via e-mail?**

Seeing none; is there any other business that we have before the board? We've been here all morning, it seems like.

ADJOURNMENT

Seeing none; is there any objection to adjourning or do I have a motion to adjourn?

MR. BOYLES: So moved, Mr. Chairman.

CHAIRMAN ESTES: Malcolm seconded, we're adjourned.

(Whereupon the meeting adjourned at 12:40 o'clock p.m. on August 2, 2015.)