

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

**The Harborside Hotel
Bar Harbor, Maine
October 25, 2016**

Approved February 2, 2017

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1. **Approval of Agenda** by Consent (Page 1).
2. **Approval of Proceedings of August 2016** by consent (Page 1).
3. **Move to accept the Draft Cobia FMP Public Information Document for public comment as amended** (Page 17). Motion by Robert Boyles; second by Lynn Fegley . Motion passes unanimously (Page 17).
4. **Move to accept the FMP review and compliance reports for the black drum 2014/2015 fishing years** (Page 26). Motion by Malcolm Rhodes; second by Wilson Laney. Motion passes unanimously (Page 26).
5. **Move to approve the FMP review and compliance reports for Spanish mackerel 2015 fishing year, and approve the *de minimis* status for Georgia, New Jersey and Delaware** (Page 27). Motion by Malcolm Rhodes; second by John Clark. Motion passes unanimously (Page 27).
6. **Move to accept the FMP review and compliance report for spotted sea trout for the 2015 fishing year and approve *de minimis* status for New Jersey and Delaware** (Page 29). Motion by Robert Boyles; second by Pat Geer. Motion passes unanimously (Page 29).
7. **Move to accept Bill Parker, Glenn Ulrich, Lee Southward, and Aaron Kelly to the South Atlantic Advisory Panel** (Page 31). Motion by Malcolm Rhodes; second by Chris Batsavage. Motion passes unanimously (Page 31).
8. **Motion to adjourn** by Consent (Page 31).

ATTENDANCE

Board Members

John Clark, DE, proxy for D. Saveikis (AA)
Roy Miller, DE (GA)
Rachel Dean, MD (GA)
David Blazer, MD (AA)
Ed O'Brien, MD, proxy for Del. Stein (LA)
Cathy Davenport, VA (GA)
Joe Cimino, VA, proxy for J. Bull (AA)
Kyle Schick, VA, proxy for Sen. Stuart (LA)
Doug Brady, NC (GA)
Chris Batsavage, NC, proxy for B. Davis (AA)

Robert Boyles, SC (AA)
Malcolm Rhodes, SC (GA)
Sen. Ronnie Cromer, SC (LA)
Patrick Geer, GA, proxy for Rep. Nimmer (LA)
Nancy Addison, GA (GA)
Spud Woodward, GA (AA)
Jim Estes, FL, proxy for J. McCawley (AA)
Martin Gary, PRFC
Wilson Laney, USFWS
John Carmichael, SAFMC

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

Ex-Officio Members

Staff

Toni Kerns
Robert Beal

Mike Schmidtke

Guests

Lynn Fegley, MD DNR
Ross Self, SC DNR
Phil Moran, SC DNR
Trisha Cheney, ME DNR
Matthew Gates, CT DEEP
Tim Sartwell, NOAA

Kathy Knowlton, GA DNR
Kevin Sullivan, NH F&G
Diedre Boelke, NEFMC
Arnold Leo, E. Hampton, NY
Susan Shipman
John Carmichael

The South Atlantic State/Federal Fisheries Management Board of the Atlantic States Marine Fisheries Commission convened in the Stotesbury Grand Ballroom of the Bar Harbor Club, Harborside Hotel, Bar Harbor, Maine, October 25, 2016, and was called to order at 10:15 o'clock a.m. by Chairman Jim Estes.

CALL TO ORDER

CHAIRMAN JIM ESTES: I would like to call the South Atlantic State and Federal Fisheries Management Board to order, please. My name is Jim Estes; I am the Administrative proxy from Florida, and I am going to try to facilitate the meeting today. We have a new staff member that Toni is going to introduce.

MS. TONI KERNS: To my right here is Mike Schmidtke. He is coming to us from Old Dominion University, where he is just finishing up his PHD on blueline tilefish. He is going to continue to work on some of that with the South Atlantic and the Mid-Atlantic Council; so you may see him doing some blueline tilefish work in the future. A little fun fact about Mike is that he played football at NC State for the North Carolina's commissioners. You can talk to him about that. His son was recently born a couple months ago. He moved to D.C., and we're excited to have him.

CHAIRMAN ESTES: Nothing like a couple hours spent with friends, and that's what we hope to do for the next couple hours.

APPROVAL OF AGENDA

You all have an agenda. Are there any changes suggested to the agenda? Are there any objections to approving the agenda, as is? Seeing none; the agenda is approved.

APPROVAL OF PROCEEDINGS

You all should also have proceedings from our August meeting. Are there any changes suggested for those proceedings? Are there any objections to approval of those proceedings? Seeing none; the proceedings are approved.

I don't think that we have anyone signed up from the public to speak, but is there anyone from the public that would speak on items not on the agenda? Not seeing a big line of people rushing up to the microphone; we'll go on to Item Number 4, and that is Consider Draft Cobia FMP Information Document for public comment. I think Dr. Daniel is going to present that.

CONSIDER DRAFT COBIA FMP PID FOR PUBLIC COMMENT

DR. LOUIS B. DANIEL: Good morning, everybody. It is good to be with you all again. What I would like to do real quickly is go through -- you should all have a copy of the Public Information Document in your briefing materials. That was an excellent work completed by your Plan Development Team; that was developed between the last meeting and now.

I can't say enough about the help that those folks did, and everyone on the Plan Development Team was very involved and active in the development of this Public Information Document. I just would like to say that at the very end of the presentation I do have a couple of questions that were raised by the Plan Development Team members that I would like to go through real quick, to perhaps begin your discussion. Just to go over real quickly what I would like to go through today. Review the current issues, where we stand. Have a brief discussion on the 2016 South Atlantic Council meeting down in Myrtle Beach that Executive Director Beal and I attended, and review the South Atlantic's Framework 4 to the Coastal Migratory Pelagics FMP to implement accountability measures to slow harvest in 2017. That was their primary objective in that discussion.

Then review the PID and the proposed management issues for your consideration, for going out to public meetings between now and the February meeting. Somewhat of a review from the last meeting with the white paper. As most of you know, the National Marine Fisheries

Service announced a closure to the Atlantic migratory group cobia; effective June 20th of '016 for exceeding the ACL.

It was around 630,000 pounds and landings were about 1.5 million pounds. We'll have some discussion over the methodology with which the landings data were accounted. The closure impacted the fishery throughout the range of the cobia, but impacts were greatest for the outer banks of North Carolina and the states from Virginia to the northern extent of the range.

The quota ran out and it seemed to be right during peak season, particularly for Virginia that the closure occurred. North Carolina and Virginia reacted to those closures by implementing some state-specific regulations to lessen the impact of that closure in 2016. Briefly, the 2013 cobia benchmark stock assessment through the SEDAR process looked at data through 2011.

That's the most current information that we have, in terms of a peer-reviewed stock assessment. While it indicates that the stock is not overfished and overfishing is not occurring; we are seeing a fairly consistent trend in declining biomass. That was a concern raised by the Plan Development Team, and the time between the past benchmark assessment in 2011 and the possibly proposed stock assessment that will be available for management purposes probably in '18, '19, maybe even 2020.

The council has sort of modified a little bit their methodology for developing stock assessments, and it makes a lot of sense; if you think about it in terms of a research. They're looking at a research tracked stock assessment that is scheduled for 2018/2019. What they are trying to do there is to try to keep all the information together and to continue to look at these stocks, but not have those stock assessments result in any management action or management recommendations from the panel.

But then what they would do is over time they would maintain these research stock assessments for all the stocks, and then on occasion, and in this case in 2019/2020 do what they call an operational stock assessment; which would actually result in management advice coming out of the SEDAR process and out of the South Atlantic Council.

That is generally the timeline that we have for stock status and for the stock assessments coming up. There will be some questions and concerns raised by the PDT at the end of this presentation. One of the big issues that continue to -- in fact, I got two e-mails this morning from the public regarding the stock boundary. Those boundaries were established through the South Atlantic Council's Amendment 20B in March of 2015. Atlantic migratory group cobia annual catch limits apply from the Georgia/Florida line through New York. Cobia caught off the east coast of Florida are counted against the Florida east coast allocation of the Gulf of Mexico cobia annual catch limit. There is a proposal to include cobia in the Stock ID Workshop in 2017. That was done during a SEDAR discussion at the South Atlantic, where they were looking at stock ID workshops and with the interest of cobia; it was kind of thrown into the mix.

It was thrown in with multiple other species for stock ID work. There is some concern raised by some of the principal stock ID folks, primarily in South Carolina, that it is possible that a lot of the data that they're working on right now, along with the collaborative and cooperative work being done with other states, may not actually be ready in 2017.

There is some discussion there from the PDT that I'll review later. Going back to the stock boundaries section real quickly. I will say, that from talking with Dr. Denson, who is on the Plan Development Team, he had a large hand in developing the genetic information in your public information document.

There is some really good data there, and a lot of collaborative cooperative work done with some

of the other states. But they're still trying to process additional samples around that mixing zone, which tends to be that border between Florida and Georgia. It is not a knife-edge distinction, north of which is all Atlantic migratory group, south of which is Gulf.

There is some fuzz there that you have to keep in mind. The work being done, by South Carolina in collaboration with other states, will hopefully narrow the information on exactly where that line needs to be. But it may behoove the commission at some point in time to actually ask Dr. Denson to come and give the presentation that he gave to the South Atlantic Council in Myrtle Beach. It was an outstanding presentation on the analysis that he and others have done on the cobia genetic boundary.

It answers a lot of questions. The next slide with Framework Action 4, Proposed Measures, these were developed at the Myrtle Beach meeting in South Carolina. There was a lot of discussion over various options and issues, and what were submitted to the Secretary through the Council were the following measures:

To reduce the recreational bag limit from two fish down to one fish; to increase the minimum size limit from 33 inches to 36 inches fork length and to limit commercial harvest to two fish per person or six per vessel; whichever is more restrictive. As far as I know, that is now either out of the Regional Office to the Secretary or in the Regional Office still being reviewed.

The expectation, the hope was that those measures would be in place to curb harvest in 2017, recognizing that the commission would be unlikely to implement anything to curb harvest for this upcoming spring season, which primarily operates from May through July/August. Just to give you a quick, short term timeline on where we are, today we're discussing the PID for your review, approval and any edits or comments that you would like to include.

Between now and January, it would be my hope to conduct public meetings for those states that

request those meetings and accept public comment. Then have those public comment summaries and the comment available for board review; and direction for FMP development at the February, 2017 meeting in the DC area.

With that, moving into the management issues for the Public Information Document, we discussed with the Plan Development Team the following management issues and questions for your consideration. I'll go through those one at a time.

Management Issue 1, one of the overarching questions relates to complementary management with the council. Complementary management of cobia is intended to increase our flexibility and management reaction time at the state level, while providing us the ability to more actively and adequately manage the fishery in your respective states.

Some of the questions that we propose putting out for public comment and review are, should the commission develop a complementary cobia FMP: a plan complementary to the South Atlantic Council's Coastal Migratory Pelagics Fishery Management Plan? What federal measures that are in place or currently proposed should be required, if any, in the commission plan?

What states should be included in the management unit? Again, the genetic analysis that has been done at least to this point, suggests, and the council has concurred that the most appropriate boundary for cobia in our region is the Atlantic migratory group from the Georgia/Florida line through New York.

I will make one note here that in the documents, you will see Rhode Island included in some of the landings information. I didn't exactly know how to handle that. It was 2 or 300 pounds every couple of years. Instead of involving the New England Council and complicating that too much, I simply note – I realize they're not in the Mid-Atlantic Council, but there are a few landings that occur in Rhode Island.

Given the upcoming genetic workshop that is proposed for 2017 at this time, should the commission plan provide the flexibility to make changes to management and stock units to reflect changes in the science? What I mean by that is if the information that is coming out of the genetics labs and the work that is being done suggests that perhaps there is a better line that may be down into the state of Florida, like some of the mackerel boundaries that occur off of Florida, would we want to be able to have the flexibility to modify our plan to coordinate and complement that new work?

The second intent and purpose is to provide a management plan that achieves the long term sustainability of the resource, and tries to implement and maintain consistent coastwide measures, while allowing our states the flexibility to implement the alternate strategies to accomplish the objectives of the plan.

Clearly, we want to provide for sustainable recreational and commercial fisheries, maximum cost effectiveness of current information gathering and prioritize state obligations to minimize costs of monitoring and management. This was an issue that was raised by the Plan Development Team, and some concerns over the cost and expense of collecting data on a fish that moves so much.

It may be that current data collection programs are about as good as we'll have at the present time; unless money is afforded to collect more data. Adopt a long term management regime, which minimizes or eliminates the need to make annual changes or modifications to management measures.

This is a very important for-hire fishery, and folks are setting up trips and the like for the following year in many cases. Changes in the quotas and changes in the potential seasonality can have significant trickle-down impacts to the fishery. The question for the public is what should be the objectives in managing the cobia fisheries

through the commission? There may be others that the public would like to weigh in on.

Management Issue 3, Coastwide, Regional or State-by-State management issues. Many of the states currently manage their cobia fisheries independently. We're considering coordinating that management, in order to avoid states being disadvantaged, based on where they occur along the migratory route; while maintaining harvest at the council's ACL level.

Just using one example with spiny dogfish, when the fishery would start up in the northeast and move south, oftentimes, there weren't a lot of fish left over by the time the seasons got to Virginia and North Carolina. The commission decided to move forward with a plan that would try to mitigate some of those disadvantages by geography of losing out on those fish towards the tail end of the season.

This is sort of a reverse of that where the fishery generally starts to our south, and ends up in the northern extreme. Without some controls early in the season it is probable that some of these quotas may be taken prior to peak fisheries or primary fishing opportunities in the more northern extreme.

Questions that the PDT worked on and developed for this section would be that are consistent state-specific management measures coordinated by the commission needed for cobia? Are there regional differences in the fishery and/or resource that need to be considered when implementing management measures? Should the plan require a coastwide closure if the council quota or ACL is met? Should the FMP require coastwide measures, for example, size and bag limits being consistent throughout the region?

Should the FMP require regional measures? Should the plan develop a suite of options for the allocation of state-specific quotas and allow states to adopt unique size, bag and season measures? One example of a point that I would bring up that is in your Public Information

Document, is the work that was analyzed and put together for us by Ryan Jiorle from Virginia on the Plan Development Team that showed there is a lot of variability in the stock fishery occurring in federal and state waters.

It varies from almost no fish taken in state waters to 100 percent as you move north, because there is a lot of variability in the fishery and how it operates from Florida to the states north of Virginia. Those may need to be taken into account as we move forward with the plan.

The Management Issue 4, Commercial and Recreational Management Tools. This is where we hope to get some information on the potential tools that could be used to manage cobia. What are the appropriate commercial and recreational measures for cobia is one question we would ask. Should the plan consider gear restrictions? For example, circle hooks with live and dead bait fisheries for cobia or the prohibition on gaffing cobia. Those are being used in certain regions and locations, the effectiveness we're not totally certain of at this particular point.

But with an increase in size limit from 33 to 36 inches, that is likely going to be a more difficult fish to handle. Unless you net those fish, one of the only ways to get them in the boat to measure them would be to gaff them.

Consideration of some of the measures that have been considered in other states to require netting of those fish as opposed to gaffing is something we would like to receive some public information on. Are there other management options that should be considered, for example, slot limits, spawning season closures, et cetera? Should the plan consider some level of de minimis or threshold landings where cobia harvest is minimal or episodic; which tends to be in those states north of Virginia.

Finally, we would ask the public to comment on any other issues for consideration in the development of the commission's draft FMP for cobia. Those are the general management issues

and strategies and questions that we wanted to put out to the public between now and the February meeting.

Real quickly, and there may be the expertise around the table, and certainly up at the head of the table, to discuss a couple of the issues that were raised by the PDT that I think are germane and important for your discussion here today. First, there was concern raised by the Plan Development Team membership on delay in the stock assessment.

There is a lot of concern, recognizing that the SEDAR process is lengthy and has got a lot of irons in the fire from many species that a lot of people deem very important. There was concern raised over the fact that we are dealing with a terminal year in the assessment of 2011. We're looking at a stock at this present time where there seems to be a decline in absolute biomass spawning stock; concerns being raised about the harvest.

We're looking at probably about a ten-year period, and at least another several years before we have the semblance of a new peer-reviewed stock assessment. That was one concern raised by the Plan Development Team that I'm really not sure how we address. The second issue that I wanted to bring up, and this was a discussion that was also had by the Plan Development Team, is the Stock ID Workshop timing.

I believe I completely and fully understand the reason why cobia were included in the Stock ID workshop, and I think that was a good move. The question is, will the information from the primary data collector, which is Dr. Denson in South Carolina, will that be available either early or late in 2017? It does not appear that that may be the case.

What type of information may be gleaned from an upcoming stock ID workshop in 2017 is for the most part unknown at this particular time. Those were the two primary issues brought up by the Plan Development Team as we moved

forward. Those are not issues that have to be resolved, I don't believe, here today.

The main question is, do we have the management issues accounted for in the document, and are you comfortable moving this forward for public comment? With that, I will stop and try to address any questions that the board may have related to the PID or cobia in general.

CHAIRMAN ESTES: Maybe to be efficient, let's do these questions first, and then I would like to hear a short discussion about the questions that Louis brought up. Then we can talk about what we want to do with the PID. First off are our questions.

DR. WILSON LANEY: Well not a question, Mr. Chairman. Are you looking for editorial suggestions now as well?

CHAIRMAN ESTES: Yes, I would like to hold that off. Let's exhaust the questions first and then we can do that if it's okay.

MR. JOE CIMINO: Thank you, Louis; I appreciate all the work done. You guys had a great team with the PDT, and it was good work and really also, a lot of good questions I think that came out of what we have here. As far as the questions, I am curious if the Science Center feels that a slight delay is possible in the workshop; question Number 1.

Question 2 would be, and forgive me because I am not that familiar with the new terms. It wouldn't be an update it would be a research assessment, is that right? Is that the new term? We said, it wouldn't be used for management, but if it was done and it showed overfishing, would there be a need to take some action or do we still wait for – I'm going to use the other term – benchmark, which is no longer a benchmark. Those are two questions I have.

DR. DANIEL: I'm going to ask John Carmichael to address the majority of those comments. I did fail to mention one thing that I would like to go

ahead and get on the record. Dr. Michelle Duval is oftentimes a member of this board, and is the Chairman of the South Atlantic Council. I did want to bring up three points that she made, since she wasn't going to be able to be here, for your consideration. This may address some of the questions.

First off, the allocations of the commercial and recreational fishery of 92 percent recreational and 8 percent commercial, actually began and started in January of 2012, not 2016 as is reported in the PID. Then she also brought up the similar issues about the stock ID workshop being actually late 2017 as opposed to early. I'm not sure that matters for Dr. Denson's concerns.

Then the other point she made was the issue on the research versus the operational track assessments. That is certainly something that I think is new lexicon for this board; and so hopefully that will be something that John can also review and have some discussion on in his comments.

MS. KERNS: I have an additional question for the assessment timing. Can you also explain in your answer how the South Atlantic Council or SEDAR or the Southeast Regional Office has been talking about how the new MRIP information would be incorporated into the assessment timing? Currently, as it stands the MRIP information should be out in 2018. Since this is a species that is quota managed, how that new data coming out would impact the ACL or how we manage against the ACL.

MR. JOHN CARMICHAEL: I guess I'll start with the easy one first, which is probably the MRIP question. With the timing of this assessment, the recalibrated MRIP information for the new survey should be available. The intent in the assessment is to use that information directly, and not have to do anything more after that. That is the plan, certainly, and whatever that does to the estimates is what impact it will have on ACLs and allocations and everything else that comes with it.

The other issue is the Stock ID Workshop. This is somewhat new territory for us within SEDAR. The attention the stock ID is getting is somewhat driven by the issues we've dealt with lately on blueline tilefish, and also by the realization from cobia, from hogfish, from a number of recent assessments looking at the stock ID information, and realizing that these stocks can be more complicated than perhaps was assumed in the past. Also realizing that one of the important things when you're dealing with that is to make sure that everybody who is going to have a management role within that stock has an opportunity to be at the table when the assessment is done.

This is one of the issues with the previous assessment of blueline, where it was done; the stock was extended up into the area of the Mid-Atlantic jurisdiction; and folks from the Mid-Atlantic weren't really involved in that assessment along the way and that created some issues. What we're trying to do is make sure we find out where these mismatches occur between management jurisdictions and stock biological definitions early enough in the process; that everyone who needs a seat at the table during the assessment, is given a seat at the table.

Everyone who needs to make sure that their management needs are going to be met by the products from the assessment, have an opportunity to comment on things like the terms of reference or that assessment. We're working on that now with blueline, and that led us to have this realization that we needed to have this Stock ID Workshop, and then that has grown as we've seen how important it is to have that and get all these various people at the table.

This workshop was planned to do a number of species. One of the keys for doing not single species approaches but several species approaches, is it lets you get more bang for your buck, in terms of bringing people who are experts in the various pieces of data that contribute to your understanding of stock ID.

I think all of you guys probably realize that genetics data can be quite controversial, and genetics experts can vary widely in their interpretation of that data. We've certainly seen that with cobia and with pretty much every stock we've looked at. One of the keys to that seems to be to bring in as many genetics experts as you can.

To get that critical mass, it can help to have multiple species that you're working with and doing that. Blueline, again, was an example. We had a dedicated stock workshop, and it was very hard to get the competing genetics experts in that place at that time and be devoted to that topic. One of the really 'bang for the buck' we were hoping for in the multiple species is to try and overcome that problem.

That put us into having this multiple species approach, and that somewhat drives the timing of the workshop. Another thing that has affected the timing of the workshop is of course the many other things that are going on with SEDAR; and balancing the data deliverables and other things between this workshop and other assessments that we have going on.

That left us really two windows to do this, which was going to be sometime in fall, 2017, sometime in July, 2017. When we discussed this at the Steering Committee, because of a lot of the concerns with what we've experienced so far in stock ID, the recommendation was that whatever comes out of this workshop should go through some type of peer review.

We're looking forward to convening something with our SSC representatives, and CIE representatives, Center for Independent Experts, that would review that information. Because we're finding that if a council is brought into an assessment and their technical folks, their SSC or in your case your Technical Committee folks, weren't involved in that. Well, then that doesn't really build support.

That causes a lot of doubt, and when you get in situations where they say well, we're not sure we're going to go along with the

recommendation of that group of experts; because none of our experts were part of that group. That led the Steering Committee to say, what we really need to have then is this peer review, so that when we go into this assessment we know what the stock boundaries are, and we have pretty good confidence in the overlap in those.

Because, if not, what happens is we get in situations like we did with blueline and others, or even cobia, where you make that recommendation early in the data workshop process. It goes through the peer review in the very end, and even if they accept it, people suddenly start having issues with it and questioning things that were done.

We've decided that it's really critical to have that decision made up front. Have it go through an independent peer review, so that you can then go into the assessment with confidence. It seems like a lot to do, something that 20 years ago in assessments we didn't hardly give a second thought to. But the reality is the stock ID is absolutely critical to everything that comes afterward in the assessment.

Models today are complicated catches modeled, indices are modeled, selectivity is modeled, catchability is modeled, and all of that is modeled on a stock-by-stock basis. All the data needs to be parsed out according to the stocks. We experienced with the first cobia assessment, delays because the stock ID changed along the way.

All the data that were put together in one set of bins had to be put together in another set of bins, and in fact they wanted to explore a couple set of bins; which was a huge demand on our data people. Because of all that, the data people are the ones who've kind of demanded, you've got to settle stock ID up front.

Something that has been relatively simple in the past is now incredibly complicated. That has affected the timing, so we're trying to get this early so we can have this peer review. Now that brings me to cobia. It has just come to my

attention, certainly here, that there may be some concerns with data being collected in South Carolina that aren't going to be ready for a workshop that looks like now is going to be held in July.

Just by way of timing, the weeks were only picked about 12 days ago. There was a meeting of the folks organizing this workshop that happened after the Steering Committee approved it happening. We're early in the planning stages for this, and not everyone who is going to be participating has been reached out to. They're just working on the list of key folks now, based on the stocks.

Later this week and next week, Julia Byrd, who is the plan coordinator for all of this and making all this happen, is going to be reaching out to key people and try to find out which dates work, and certainly at that time try to find out where things stand on data. If we get in a situation where the cobia information is not going to be ready for the timing of this workshop, then I think we have to consider, perhaps doing cobia on a stand-alone or through some other way that we can make sure that information is available.

Because we certainly don't want to do this and know that there is going to be new information available six months or a year down the road. Now that could affect the overall timing of the cobia assessment, I don't know. That would really come down to when it's going to be done and when the data is available. I guess I'll pause here, because I feel like I've been talking a long time, to see if there are any other questions about the stock ID. If we get through that, then I will talk about the research track and the timing of the cobia assessment.

MS. KERNS: Following up on the timing for the MRIP data, just to confirm. Will the Southeast Regional Science Center then develop a method to back calculate the MRIP data so that what we judge the recreational fishery on, in terms of if they achieved or did not achieve the RHL?

Because if the new estimates have the potential to be six fold higher than what we set the ACL based on, because we used the old method data, to set what it's based on. Then using the new information every year to judge until 2020 or when the new assessment comes out; so somebody would back track it?

MR. CARMICHAEL: Certainly, all my participation with the various transition teams and calibration teams is that the intent is, we would have to adjust management parameters to match the new data, or we would have to calibrate the new process to the old data; which developed the management parameters.

But everyone involved recognizes that you can't change the survey, thus change your yardstick without changing what you're trying to measure. Which way it goes, I don't think we know at this point. Whether we adjust the entire landing streams, and then managers make the change to change their ACLs, or we have a calibration of the new MRIP survey that is consistent with the way MRIP is done up to this point.

The latter is probably a little bit cleaner for management purposes, because they're not taking framework actions or what have you to change all of their ACLs. But certainly, that has to be done. Everyone knows that you can't evaluate and apply an ACL measurement on a new way of measuring your fishery without updating what it is you're trying to achieve.

CHAIRMAN ESTES: Mr. Bush, did you have a question?

MR. DAVID BUSH: Dr. Daniel, thank you for the presentation. Maybe two questions after a brief statement. I'm sure you've probably been beat up with a few e-mails asking questions about certain aspects of this, one of them being the tagging study from the Chesapeake Bay showing about 80 percent of the fish supposedly stayed there. When you were looking at biomass, did you include this biomass in that overall reduction, or reduction of biomass that you mentioned?

DR. DANIEL: You'll have to repeat the question, David; because I'm having a hard time hearing you back there.

MR. BUSH: Sorry, I'll move up here a little closer. Again, thank you for your presentation. The question I had was, the VIM study that was done out in the Chesapeake Bay showing approximately 80 percent of the tagged fish stayed there. Now that particular biomass, since you don't really have the stock IDs pinned down at this point, I know it is sort of a crystal ball-ish kind of question, but was that biomass taken into consideration when you were looking at an overall decrease in the biomass?

DR. DANIEL: I'm not exactly certain if that information specifically was used in the biomass calculations. I would tend to doubt that it was. But the issue really, if you see the presentation that was done by Dr. Denson, he does bring up these specific distinct population segments of which Chesapeake Bay actually, he believes, is a distinct population segment; along with a distinct population segment in the southern part of South Carolina.

South Carolina actually has moved forward with some management measures to protect those fish in the southern portion of South Carolina DPS. I don't know that anything yet has been done with the Virginia portion. I think, again, that any of the information related to the tagging data, the length of time that the tags were at large, you know, certainly, those fish are moving inshore and offshore, north and south.

It would be very difficult, I think, with the information that's available to date, to be able to make any specific recommendations in terms of biomass trends based on those movements; that really are rudimentary at this point, I think. But as Dr. Denson begins to collect more samples and collects more information, which I know he's working with Virginia specifically, North Carolina and other states to collect that data.

Hopefully, a pattern there will arise. But at the present time, as John indicated, the complexity

of the genetic IDs and trying to parse out the various genetic components of these stocks is extraordinarily difficult and complicated. Until that information is lock solid, I don't believe it would be use to manipulate or modify the way that the general stock assessment has been completed to this time.

MR. BUSH: My second question is sort of more for my own edification. When the ACLs were set and then the couple of northern states that were added to that list, the allocation was set kind of without those states being involved; if I understand correctly. Do we anticipate that possibly being readjusted at some point?

DR. DANIEL: Well, I think the ACL is based on the stock assessment and what number comes out. For cobias position, we're not overfished and overfishing is not occurring. The current ACL has been set as a precautionary measure to avoid overfished and overfishing occurring; which kicks in a whole new set of council and National Marine Fisheries Service protocol and requirements for the plan.

At the present time the ACL is set at a level that's precautionary to avoid those problems from occurring. I don't believe that the distribution of the catches really have played a role in the ACL at all, it is a specific number. Where you run into an issue there, potentially, is with the allocation and the current 92-8, whether or not that takes into account any of the issues that are going on say, north of Virginia.

I would be doubtful that it would have much of an effect, because of the extraordinarily low landings that are measured north of Virginia. I think once you get up there, I would be speculating at the percentage, but it is an extraordinarily low percentage that I doubt would have much of an impact on either the ACL or the allocation distribution.

But certainly, I believe -- I assume that it would be the intent of the commission if they move forward with this plan, to provide the opportunity for any state that has an interest in

cobia, to make sure that their state's interests are reflected in anything that occurs at the commission level.

MR. CIMINO: I would like to follow up on Mr. Bush's question. Perhaps I didn't fully understand it. I would like John to correct me if I'm wrong. Virginia participated in the last SEDAR. We contributed quite a bit of data. We had some of the best age data on the coast, and in fact, we were responsible for increasing that maximum age. This was a statistical catch-at-age model, and I think we well represented the catch-at-age for the Chesapeake Bay harvest. As far as the last assessment, that biomass and that catch is certainly a part of that model. I just wanted to point that out.

MR. ADAM NOWALSKY: One item that I don't see in the document right now, and I'm curious if there was discussion at the PDT level. The reason we're really here is a function of what the recreational catch estimates have been in recent years. What we've learned, despite the many improvements with the MRIP program, is that individual intercepts can drive these numbers by a factor of literally hundreds of thousands individual intercepts.

When you're talking about the very low rate of intercept, that has huge implications, now I'm not familiar with how the South Atlantic has dealt with these recreational issues in the past. I know at the Mid-Atlantic two of the FMPs we deal with, one for summer flounder, black sea bass, scup looks at a catch on an annual basis, compares it to the last year and then changes the regulations accordingly.

The bluefish plan, however, does it differently, allowing for an averaging of recent years harvest. My question right now is, did the PDT have discussion about these different methods for using the recreational catch data, and what options, if they did have that discussion, did they consider putting in the document for comment on the public on how best to try to mitigate these impacts that the MRIP data is having.

DR. DANIEL: Very good question, and then I'll make an effort and then if others want to step in, I guess, Mr. Chairman that would be okay. There was discussion at the PDT level on the landings, primarily because I messed them up in the document when I was initially putting them together. I was comparing apples and oranges using some of the MRIP data and some of the Southeast Fishery Science Service data.

We decided to go with the Southeast Fishery Science Service data, because that was what was being used to manage the quota. That information had remained relatively stable over time. The PDT is not making a determination as to which one is better or not. It is just simply that that was the number that was consistent, it was the number that was used to close the fishery in '016, and so that was the number that we were consistent with.

I think that is the key is being consistent in the methodology that you use. My understanding, and there are folks in this room that know a lot more about the MRIP specifics than I do. But one of the things that occur is that there are adjustments made to MRIP over time, and that those numbers can fluctuate.

When you go to look at the landings data, they may be 1.5 million one day and 1.7 million after some time. It does make it a little more difficult. I think, as John indicated, the intent and purpose is to try to get the MRIP data, which we've all bought into and agreed to, as the primary methodology that's used for managing and for accounting for the harvest of recreationally caught cobia. I think our concern at the present time, concentrating on cobia and not delving into the specifics of the Southeast Center's data collection programs and the MRIP collection programs, was to be consistent at least in what we presented to the board.

In terms of any kind of proposal of any kind of increases, there have been efforts and attempts to incorporate for-hire logbooks and trying to collect information on the for-hire sector that has not gone well, dealing with the for-hire folks,

at least in certain regions. How to improve that data collection program on what tends to be a fairly rare species, there is information coming out right now about some of the PSEs, at least in the Virginia and the North Carolina estimates for this year that has raised some concerns.

I'm not sure that anyone and I certainly don't have the answer to those questions at this specific moment. But they are definitely issues that I'm certain will be raised throughout the public comment period and into the next several iterations of the FMP, if we move forward with one. Not a whole lot, but it just explained that there are a lot of issues and I concur with your concern.

MS. KERNS: Adam, I think what you're asking in addition is, can we add a question or two in the PID document about how we address harvest for recreational landings, and can we do averaging, can we not do averaging of that landings information; and how do we use those data, whether it be to determine whether or not we've hit the RHL or not with averaging data, or do we only use averaging data or some other format of the information to help set the measures? We can add that question to Issue 4. What Louis did just bring up, though, is a question for this management board. Typically, when the commission pulls data for the recreational fishery, we use MRIP data from the document, or for documents that we manage. The South Atlantic Council does not use MRIP data; they use the information that comes out of the Southeast Fisheries Science Center.

I don't know, and this is a question to John, does the Southeast Fisheries Science Center go outside of the southern states for the landings? For example, as Louis said, Rhode Island has landings of cobia. They are very small, but it is still something that we should be including in our management document. It is not there right now.

If it is not done by the Southeast Fisheries Science Center, then the board needs to decide how we want to move forward. Because we will

have to consider what data we use, say, you decide you want to do allocations. We have to know what set of data to use to do those allocations.

MR. CARMICHAEL: The South Atlantic is a lot like the Mid-Atlantic it sounds, we have some that use averages and some that use annual years for your first question. Cobia is one that was set up with averages, the three-year-moving average, but the clock restarts when there is a change in the ACL, so that is the situation we were in. The ACL had changed and that's why the moving average couldn't be used.

But it is certainly something that can be considered. As far as the MRIP, it is correct. The Southeast Center does some additional post processing of the MRIP data, and they use the core estimates that are available from MRIP; and their processing addresses the weight estimates from MRIP. I think if any of you have looked at an MRIP query, you know it warns you, weight data is measured with great uncertainty and is not as reliable as the estimates of the numbers of fish caught, because that is what they ask people about numbers. They measure fewer fish than what they actually see.

There is always great uncertainty in the poundage that is associated with any of those MRIP estimates. That is really a problem for many of the South Atlantic species. We manage many species; some of them are very rare in their recreational database. What the Center has done, is come up with a way to do a different sampling approach to try to fill in missing values or when there maybe is only one fish measured for a wave mode, what have you combination, perhaps within a year.

They borrow from adjacent cells, essentially, and they try to come up with a better estimate of what the actual average weight is for a given fish within a given component of MRIP. How much of that borrowing they do, obviously depends on how good the sampling is. For some species it's very little and their estimates will pretty well match, most of the time exactly what you see if

you take an MRIP query and then you look at something put out by the Southeast Center for the actual poundage that is landed.

That is assuming, of course. you're only looking at the private and charterboats, because you can't forget also, within the southeast we have a separate survey that does the headboat. If you were to do an MRIP query and look at landings of recreational in the southeast, and compare it to something from the Center that included the estimates from the Southeast Headboat Survey; the two are not going to match and are never going to match, because that component is not in the MRIP query database.

We have two things that are at work here within the southeast. One is the headboat survey that has to be accounted for, so you're not going to get the MRIP exact, and the other is the alternative approach for dealing with the weights. Then the southeast also includes the Gulf, so if we have species that, depending on how they wrap around the South Atlantic and Gulf jurisdictions, and what you're doing with Monroe County down in the Florida Keys, that could lead to other post processing things that are done to get the data to match the actual stock or the management unit, which may not make them match within the overall MRIP queries that you do.

MRIP, within the southeast, is a much more complicated beast than it is with the guy say, in the Mid-Atlantic and New England; and we're kind of jealous of that at times. Because we have so many other things that are in play, it makes it very hard to just do a simple query and get the information. But, in general, they rely on the estimates, but there are things that have to be done afterwards to make sure that they are complete and accurate.

MS. LYNN FEGLEY: Switching topics slightly. I think, under Issue 3, I just wanted to confirm that there is some room for conversation for the public for issues like the Chesapeake Bay, where we may have access to a smaller fish. I'm wondering about conservation equivalency; if

the flexibilities that are mentioned under Issue 3 cover that, or if we need to have more specific language for the public to comment on something of that nature.

DR. DANIEL: That was not specifically discussed by the PDT. In the development of this, I don't recall that being brought up. Certainly, if it's something that the board wanted to consider, we could try to -- I think that the regional differences bullet, the second bullet, probably addresses that; if the board agrees that it addresses that. If not, we could make some slight modifications to the language to make sure that it addressed that if it was the desire of the board. That was not discussed or considered, but it could be.

CHAIRMAN ESTES: I think, if there is not any objection, we'll ask that that be clarified in the document.

DR. DANIEL: That's not a problem.

CHAIRMAN ESTES: Other questions. Robert. Comment?

MR. ROBERT H. BOYLES, JR. I was wondering, Mr. Chairman, if you were ready for a motion.

CHAIRMAN ESTES: Yes, but do we want to first discuss the type of data that we want to use to estimate harvest? Do we want to do that here?

MR. NOWALSKY: I appreciate the responses I received to my question, and while Toni might have most directly answered it, the information from Louis and John were extremely helpful in building on that. Based on those complexities, it gives me pause and to think that those issues should actually be described for the public; and that should be an issue that we go out to the public and get some more information on.

I would recommend -- I appreciate the suggestion of adding one bullet point under recreational management tools. But from what I've heard, I think the whole issue of recreational deserves its own issue, quite frankly. There are just so many questions about the data; how it's

used. What should be used, what to use to calculate the RHL for a comparison basis, whether to trigger ACLs.

I think I've just touched the tip of the iceberg, not to take away from Dr. Steneck's presentation yesterday. I think it's an entire issue unto itself, and I would encourage consideration by this board of requesting that recreational be broken out as a separate issue, and a number of these topics that have been discussed recently be described to the public, and asked for comment on.

MS. KERNS: Adam, we can definitely separate the two issues. I just am curious, what kind of feedback will you be looking for, in terms of asking the public whether or not we should use the Southeast Regional Data versus the MRIP data? Do you think that the complexity of the issue is a decision that you all should decide. What would you be seeking us to find from the public on them; or is that something that the board can answer for us today?

MR. NOWALSKY: Well, I would like to believe that the fishermen would have some input, as far as collaborative basis, with regard to their thoughts about what the pros and cons, the strengths and weaknesses of each of those datasets are.

Getting that feedback could potentially help inform us with the decision. Moreover, I would like to hear the thoughts about ways to help mitigate those impacts. These impacts, and we're talking directly about cobia, but the impacts of that harvest data go way beyond cobia. Any and all opportunities that we have to get some more information about how to mitigate the extreme impacts of the limitations of the data, I think we would be remiss if we didn't take advantage of that opportunity.

MR. BOYLES: Along those lines, and to keep the conversation moving along, it strikes me that if the commission customarily addresses these questions by using the MRIP data, then I, for one, would be in favor of being consistent and using

the MRIP data in compiling the information for the PID.

DR. DANIEL: Obviously, we'll do whatever the board recommends. Is cobia the place to have this huge debate and deliberation? I am asking the question. This is a major issue for the commission, if we're going to move into this discussion as to what's better; Southeast data or MRIP data. Again, I will restate that the PDT, as long as we were consistent in using the various technologies and methods that we have available, was that appropriate.

What the impacts are to an individual state or an individual fisherman. I don't think we know the answer to that question at this time. In a fishery where there tends to be less interest north of Virginia, I don't want to say any more than that about it. This is a coastwide issue that we're delving into here with cobia that may not be the most appropriate place to address this question; just a comment.

CHAIRMAN ESTES: Robert, follow up?

MR. BOYLES: I want to follow Dr. Daniel's comments with something he said earlier. For the board, I think it is helpful for us to take a deep breath and remember why we're here. The latest stock assessment under which we're operating for cobia suggests we're not overfishing and the stock is not overfished.

In 2015, we blew the ACL by 2.5 times. I believe, one of the purposes here, is to get us all on the same page to help us manage and sustain and conserve this fishery; so that the next stock assessment will also reveal that we're not overfishing, and the stock is not overfished. Dr. Daniel, I appreciate your comments.

The point about the data and the veracity of the data, the representativeness of the data is in my estimation, in my opinion, is a discussion for a much broader audience. The cobia anglers that I know, not only in my state, but elsewhere, I don't think are going to be well served by that conversation. I struggle with understanding

sometimes the distinction between Southeast Fisheries Science Center produced data, catch estimates and MRIP.

It is a difficult concept for me to grasp. I'm not sure that it's really necessary to go to the public with an inside baseball question. I just would, again, encourage the board to remember the purpose here. I believe, when the policy board said yes, let's develop an interstate fishery management plan, is to let's see if we can develop a framework under which and by which we may work together to sustain this resource in conjunction with the council, in a complementary fashion, so that we do not end up with this fishery overfished and overfishing.

DR. ROY CRABTREE: I agree with some of the comments Robert made. The way that the Southeast Fisheries Science Center, I think, re-stratifies and reweights some of the weights and things, is done across all of the species that we're tracking now in the southeast. If we were going to make a change in how we do that, I think we would have to apply it across all of these species to be consistent. But at this point, I mean the Science Center is advising us that the re-stratification the way they're doing it, produces the most reliable and the best estimates. That's what we're going to have to use to track ACLs at the federal level at least; until something changes with that.

I'm not sure that going out to the public on a question like that is really going to be productive, because I think it largely gets into a highly technical statistical discussion about how to deal with, what I think, as John said, is principally the weights that are used. I don't even understand exactly how they do that myself.

I'm not sure we're going to get a lot of good input from the public on that. I think that is a larger question. As Robert pointed out, we did have a substantial ACL overrun in 2015. We have the preliminary catch estimates for 2016 through Wave 4, and it appears to me that the catches in '16 may be as high ultimately at the end of the year as they were in '15; because I'm seeing that the preliminary estimate is something on the

order of 1.2 million pounds being caught at the end of August.

Again, that is off the MRIP site. There will be changes to that. As John pointed out, that doesn't include the headboat survey, so there are more catches that will be added into that. But it does, based on everything we know, look like that we're fishing this stock at a level that is not sustainable. Even with all of the uncertainties about the catches, the differences are so great that it's hard to ignore it.

I think we do have a real problem here. I think federal management alone cannot solve this problem. I think even if the EEZ was completely closed year round, I don't think it would make a great difference in the magnitude of these catches, because most of them seem to be coming out of state waters.

I think that the only way we're going to get these catches to a sustainable level is through a commission management plan. I think there is a lot of room for discussion between the commission and the council, as to what, if any, role federal management needs to play in this. But it's clear to me that successful management is going to require an ASMFC plan.

MR. CARMICHAEL: I think it will be helpful in the document to clarify the different data sources. To be clear that it's not an issue of MRIP versus Southeast Center data, they are all MRIP data. The Center just has a separate processing step applied to the MRIP data. It would certainly be helpful to clarify that to explain why an MRIP query that people can readily access may not be the same as the document.

Also, because this is probably new to many of the affected fishermen, this idea that there is this separate monitoring of the headboats of the Southeast Regions Headboat Survey; folks are accustomed to being able to go to MRIP and see the entire recreational landings in one-stop-shopping. They are not going to get that in this.

I think it would be very important for the document to at least acknowledge that; that there are separate estimates brought in from the headboat survey, and they are not available over the MRIP system. I think we would all love one day if you could get all of that information in one place consistently. But until that time, it would help to clarify what the different sources are, so that people that aren't accustomed to this aren't then coming back to you and saying, look, you don't even have the landings right. We do this a lot, just because we do face that quite often when people go to the readily accessible sites and get information and it doesn't match what's in assessments or management plans or what have you. It is important to explain it to them.

DR. LANEY: It seems like we have gotten into comments a little bit, and I did have one editorial concern, I think. If you look at Page 2 of the document, it states that there was a closure during 2016, and it did have an economic impact et cetera, et cetera. Then if you go to Page 3, it clearly states that North Carolina and Virginia came up with alternative measures so they didn't have to close.

I just think there needs to be some clarity in the document that states up front somewhere that there was a closure in federal waters, but that there wasn't a closure in state waters. We just heard Dr. Crabtree share the preliminary results for 2016. My concern is over how we say or what adjectives we use, I guess, relative to economic impact.

Clearly, if a closure is put in place in federal waters, then that has some level of impact. But if you continue fishing in state waters in North Carolina and Virginia, what's the real magnitude of the economic impact? If we have data that we could cite about numbers of trips declining or numbers of clients who canceled trips or things like that.

It would be good if we could share that information. But I do think we need to state up front, as opposed to reading something on Page 1 that implies there was a closure and then Page

2 says well, yes, but it didn't apply in North Carolina and Virginia state waters. I think we just need to fix that. It's just an editorial thing.

Oh and then, I did want to complement the PDT and Louis, I think they did a great job putting the PID together. I'm especially attuned to the genetic information that's in there. Again, I think I said it at our last meeting and I'll say it at this one. I think we, as a commission, have a responsibility, not only to look at things like age structure and SSB and distribution of fishes; but also the genetic health of the stock.

In those cases where you have stocks that are homing, and that was clearly pointed out in the PID. There are aggregations of fish that are spawning in different geographic areas that we need to be concerned about. I'm really waiting to see the outcome of the genetic work that helps us to further differentiate where there are actually different spawning stocks.

I have this fear of, well not a fear, but a desire to avoid ending up where things wound up in some parts of the northeast, where you had a whole lot of local cod stocks that were spawning locally that didn't get recognized until after they had already been fished out. Hopefully, we can avoid any sort of scenario like that.

CHAIRMAN ESTES: I think we will clarify that issue. Are there any objections to, in the document, regarding the sources of data, identifying the sources of data to be consistent use the data that we get from the Southeast Science Center? Are there any objections to doing that? Seeing none; that's what we'll do. Do we have more questions?

DR. DANIEL: Just a comment. That's what I have on my list at this particular point in time, just so everybody is clear; a distinction using the southeast data but also distinguishing between the Southeast Science Center information and the MRIP data so that that is clear, particularly bringing up the point that John raised about the headboat survey information, and addressing Wilson's point on the implication that it was

closed when it really maintained openness in Virginia and North Carolina after the closure. Those are the corrections that I have for the public draft at this time.

CHAIRMAN ESTES: We've got Lynn and then Joe.

MS. FEGLEY: I think this goes into the editorial category, but it links with what Wilson was saying. It might be helpful for the public under Issue 1 to be a bit more descriptive about what exactly a complementary management plan means. In the white paper that we went through in August, there is a really nice description of the different ways you can manage, whether it is joint or complementary or ASMFC specific.

I feel like it is not particularly clear what we're buying when we do a complementary plan. I think some clarification there, and I think it speaks to what Wilson was saying, as well. When the states are open but the feds are closed, what exactly are we doing here?

CHAIRMAN ESTES: Good point; we'll add that in there.

MR. CIMINO: I appreciate the order you chose, because this will be a follow up to Lynn's question then. When this board voted on implementing this public information document to go down this road, if I'm not mistaken Dr. Duval's motion specifically stated that this would be complementary management.

I believe the Policy Board also voted on going towards complementary management. I'm curious, since that's the first question is should this be complementary management. Is this being revisited and would the board be re-voting on whether or not that is the path we're taking?

DR. DANIEL: I'll be honest, I wasn't altogether clear on what action the board was specifically taking there; and felt that because of some of the comments that we had received that that may be something that you would want to have some public comment on. Certainly, if the board has decided that it will be complementary

management with the South Atlantic, we can make some modifications to the document to reflect that.

I appreciate those comments. It is a similar issue with the management unit. The council has made the decision and the genetics data seem to confirm that that Georgia/Florida line to New York is Atlantic migratory group cobia. But we are going to provide the opportunity to the public to make some comments on that; whether it's contrary or consistent with the data or not is a tough one. I would be standing by for any suggestions on how to address that contrary to the way the document lays it out at this time.

MS. KERNS: Joe, the only other thing that I would add is we could make it clear in the document that it is the intention of the South Atlantic Board to do complementary management; does the public have a differing opinion. Because you do have the ability, since it is not a final decision until you approve the FMP, you can alter from your initial initiation of the plan.

MR. CIMINO: That works for me, thank you.

CHAIRMAN ESTES: Are there any more comments before I go to Robert, because I think he had a motion.

MR. BOYLES: Again, a nice shout-out to the Plan Development Team; with that and with the discussion around here at the board, as amended, **I would make a motion that we approve the Draft PID for public comment.**

CHAIRMAN ESTES: **As amended, did I hear you say that?**

MR. BOYLES: **Yes.**

CHAIRMAN ESTES: I thought so, thank you. Do I have a second? Lynn. Okay, I will read the motion; apparently not yet. Okay, move to accept the Draft Cobia FMP Public Information Document for public comment as amended; motion by Dr. Boyles, seconded by Ms. Fegley.

Are there any objections to the motion? Seeing none; the motion passes unanimously. The next item is the Red Drum Working Group Report. I think that is going to be given by Jeff.

RED DRUM WORKING GROUP REPORT

MR. JEFF KIPP: Good morning, everyone. I'll be reporting on the work and recommendations for the tasks from this board to the Red Drum Technical Committee and Stock Assessment Subcommittee following the presentation of the stock synthesis model estimates. Just a summary of those tasks, looking at the appropriateness of the current biological reference points, looking at F based reference points for juveniles only.

The validity of age-based models for red drum given some data limitations in their life history, also looking at the tag return rates from the stock synthesis models and determining how to treat the tag recapture data within those models. The final is doing continuity runs of the statistical catch-at-age models using SEDAR 18.

This is just a summary of the meetings that we've had for addressing these tasks with those highlighted in red occurring since the August meeting, when we last updated the board on the progress for these tasks. I'll just go ahead and read the tasks as they were given into the record.

The first was biological reference points; investigate whether the current biological reference point for overfishing 40 percent SPR target and 30 percent SPR threshold, is appropriate, given the species long life history.

This task is twofold in that the board is interested in whether spawning stock biomass is an appropriate metric, and whether the 30 percent threshold and 40 percent target are suitable goals. The board also requests the development for an overfished reference point recommendation.

Two of the major items that the group looked at to address this task were first, a literature review

and discussion amongst the group of the theory and use of these percent SPR reference points relative to red drum life history.

In the document that was provided for meeting materials, there is kind of annotated bibliography of a lot of the reference that was reviewed by the Technical Committee relating to SPR reference points; and also some projections under various stock recruit relationships and a different percent SPR or escapement trajectories. This is just an example of what we looked at for the projections, and this actually comes from analysis Mike Murphy did for Gulf of Mexico red drum in Florida. But these figures show two equally or close to equally plausible stock recruit relationships for red drum within the purple lines.

Those stock recruit relationships are fit to biomass and recruit estimates out of models. Then also, different expected recruitment and spawning stock biomass values from a population, given that stock recruit relationship and various fishing levels at different SPR percentages, which are the different dashed line trajectories. You can see under these two equally plausible stock recruit relationships you have very different effects on the expected recruitment under those different fishing mortality regimes.

This is some of the uncertainty that the group looked at, when trying to determine if the current target and threshold are appropriate for red drum. The recommendation from the Technical Committee for this task is to maintain a 30 percent SPR threshold and 40 percent SPR target for both red drum stocks.

They did note that improved information on the stock recruit relationship is necessary before alternative percent SPR levels can be reliably evaluated for management of red drum. An overfished reference point is not recommended without reliable spawning stock biomass estimates.

But they did note since SPR is a recruit-based reference point, it is important to qualitatively consider the recruitment trend from the model estimates with SPR estimates in the absence of these biomass estimates in an overfished status. The SPR doesn't necessarily reflect any potential declines in recruitments, so it is necessary to consider this information with no biomass estimates from the models.

The F based reference point, given concerns regarding the appropriateness of the current reference point and the lack of data on adult red drum, the board would like to see an investigation of the feasibility of an F based reference point that looks strictly at the harvest of juvenile red drum.

The board looks for guidance on whether this type of reference point would provide an appropriate level of information for management. The group started with discussion around advantages and disadvantages of a potential juvenile F-based reference point. Here the advantages are listed.

We did note a strong relationship between juvenile fishing mortality estimates and SPR estimates out of the modeling approaches, which hence that you could potentially use a juvenile fishing mortality reference point or juvenile fishing mortality estimates almost as sort of a proxy for SPRs across the entire age structure.

There is the potential for improved precision for these estimates, since most of the data does come from juvenile fish. There is also potential for reliable estimates from several different approaches, which could be used to validate these alternative approaches. These figures show the relationship between the SPR estimates on the Y axis and the F estimates on the X axis from the stock synthesis models for the southern stock on the left and the northern stock on the right.

These are some of the disadvantages the group considered when looking at this task. One that's

a reoccurring issue that has been discussed in past assessments for red drum, mainly around a potential use of escapement as a reference point, is the difficulty identifying the appropriate reference point; particularly without information on the stock recruit relationship, and how these different fishing mortality levels on the juvenile stock affect spawning stock biomass and subsequently future recruitment.

Another major disadvantage is that this type of a reference point would ignore fishing mortality on mature fish. The current data does support increasing fishing mortality on mature fish, mostly due to increasing catch and release across the different stocks. Also another disadvantage is the juvenile-based fishing mortality reference point would be independent of recruitment, similar to as I mentioned for the SPR reference points.

There is the potential if spawning stock biomass declines, there could be a decline in recruitment, and even though you are fishing that declined recruitment levels above the threshold or target that doesn't provide information on that declining recruitment. That wouldn't necessarily trigger management action by just using that reference point.

This just shows that increasing trend of the fishing mortality on the mature fish from the estimates from the stock synthesis models with the northern stock in the upper left hand panel and the estimates for the southern stock in the lower right hand corner. The recommendation for this reference point, the Technical Committee concluded that management with juvenile F-based reference point could lead to stock depletion.

This could occur as a result of declines in recruitment due to declines in spawning stock biomass and/or poor recruitment due to the high variability in recruitment that has been observed in red drum. The Technical Committee recommends against using a juvenile F-based reference point solely to manage the red drum stocks.

The validity of age-based models task. The board is concerned that the lack of information on adult red drum, especially in the northern stock, may impact the ability of the stock synthesis model to accurately measure stock abundance. As a result, the board asks for an evaluation of how red drum life history and current regulations, namely the moratorium on fishing in federal waters, may limit the validity of an age-based model such as SS3.

I'll just highlight here a couple of the main points that the group discussed when discussing this task. The first is a lack of contrast in the data used to inform potential stock productivity in the models. The model time series is short relative to red drum longevity, and also the history of the fisheries. The model time series starts in 1989; due to lack of different data types prior to that year.

Also the longline indices, which provides information on the adult portion of the stock, showed little contrast and again, provides little information on the potential productivity of the stocks. All fishery selectivities are dome shaped, due to the regulations and also the life history of red drum as they move offshore and become less vulnerable to fisheries.

This can confound the estimate of selectivity where you have a descending slope of selectivity for older fish. The model can struggle to estimate what that descent is due to a decline in mortality, and what portion of that descent is due to a decline in reduced availability as those fish move offshore.

These two points here are of concern. These get more to potential data bias in the data than were used in the models. It was noted that estimated harvest of the adult fish from MRFSS back in the late eighties and early nineties is very low, in a period when harvest of these adult fish was legal. The information from tag recapture data conflicts with these estimates, suggesting that a high proportion of adult fish were actually harvested during this same time period.

Also, we used volunteer tag recapture length data as a proxy for the size structure of the dead recreational discards and the recreational CPUE. There are some limitations of using these data based on instructions that were given to recreational anglers on certain sizes that were supposed to be tagged and things like that.

The recommendation for this task is to continue using age-structured models for red drum. The Technical Committee believes that the differences in red drum life history characteristics and vulnerability to fisheries across ages, is best modeled with an age-structured model that tracks cohorts through time.

However, they do recommend addressing some of the effects that I just went over of data limitations through additional assumptions and reduced model complexity. The next task was to look at the tag return rates. Given the sensitivity of the SS3 models to the tag return reporting rate, the board asks for an evaluation of potential tag return rates for each region and to determine if the tag return data should be incorporated in new model runs.

The board is specifically interested in a run which uses an 18 percent tag return rate, per the suggestion of the desk review report. I'll note here that most of this work focused on the northern model, due to the inconsistencies between the reporting rates out of that model, and the reporting rates in previous literature looking at the tag recovery data.

Some of the things that were done to look into this task were a likelihood profile, data weighting sensitivity runs, comparison of external tag recovery model estimates to the estimates from the stock synthesis model, and model runs with simulated recapture data. For the southern stock model there were sensitivity runs that we completed looking at some of the fixed reporting rates, specifically that 18 percent that was requested. This is a likelihood profile for the northern stock, and the Y axis has the change in

the negative log likelihood relative to the minimum negative log likelihood.

What this shows is for these lines here, particularly this black line, which is the total negative log likelihood. As that line increases and gets the higher values, it suggests that the parameter values on the X axis, which are the reporting rate estimates for reporting of tagged red drum, become less likely given the data that are used in the model. As you increase the reporting rate from 10 percent, which is at the very far left of the X axis up to 95 percent. The model suggests that those estimates are less likely as you increase, given the data that you're using in the model.

However, I will note that there does appear to be some conflicts amongst the different data components that make up the total negative log likelihood; and these are the other colored lines here on this figure. If you look at the blue line, that is the length composition data, and that mostly agrees with this increase in the total negative log likelihood. But certain data components like the conditional age-at-length data, which is the green line, have a different trend and seem to conflict with some of these other data components. These are some of the estimates from the different runs in the likelihood profiling. On the left are the annual spawning potential ratios, and on the right are the Age 0 recruitment estimates, and you don't need to see the specific lines here and what they are.

But I will just note that for the lower SPR estimates all bundled up, those are from model runs where the tag reporting rate is fixed at 45 percent and lower. The one gray line in the middle are the SEDAR 18 SPR estimates, with the target SPR the dash black line. Then the other sort of group of high SPR estimates are from model runs with the reporting rate fixed at 50 percent and greater.

Similar to that for the Age 0 recruitment, you can't really see but there is a line that is much lower and there are several overlapping lines.

Again, those are the estimates from the models with the reporting rate fixed at 45 percent and lower. The black dash line are the recruitment estimates from SEDAR 18, and then the other group of recruitment estimates bundled together are the recruitment estimates from the models with reporting rate fixed at 50 percent and higher.

What this shows is that the model is kind of flip flopping between two drastically different solutions here, which suggests some instability in the model when the tag recapture data are included and the reporting rates are fixed. This further shows that instability I just mentioned. On the left, again, are likelihood profile plots.

These are for the unfished recruitment estimate out of the model, and for the left figure, that is the likelihood profiling with the tag recapture data and the reporting rate fixed at different values. What this shows is that the value from the base model, which is 5.5 on the lower left hand end of the X axis on that first panel, are the most likely estimates of that parameter, given your data used in the model.

As you fix that reporting rate at higher and higher values, the data support those parameter estimates less and less. On the right side is a likelihood profile over the unfished recruitment, from the stock synthesis model without the tag recapture data. This shows a much more expected pattern in those estimates across the different values for that parameter, with a very defined lowest likelihood in the very bottom of that convex shape.

Then as you get further and further away from that most likely parameter estimate, the likelihood increases, suggesting a less likely parameter value. Given these data conflicts that were observed when we included a tag recapture data; there is the potential for different weightings of the different data components in your model to have significant impacts on your model estimates.

What we tried to do here is to adjust the weighting of the different data components, specifically the tag recapture data, to see what kind of influence that had on the model. Just a quick note here on that, the model was generally insensitive to these alternative weighting scenarios. One tendency was to estimate a more depleted stock than the base model which we reviewed a couple meetings ago.

As the weighting of the length composition data is decreased and/or the weighting of the conditional age-at-length data is increased. Another analysis we did here was to look at external tag recapture model estimates, so we used the program MARK, which is tag recapture modeling software, and looked at what the estimates from those models were. However, this was very limited in what we could do because of how the data had to be treated, and how that was different, and how they are treated in stock synthesis. This didn't provide a lot of information on the differences in the estimates out of this type of a modeling approach and not a stock synthesis.

But it did highlight this pattern that we see here. These are the tag recapture data matrices for Age 1 fish in the top matrix, and Age 0 fish in the bottom matrix. This is a ratio of recapture rates in the tagging data that was used in Batchelor et al, 2008, which is a paper that we've referenced often with the 18 percent reporting rate estimates out of that paper; and then also the tag recapture data as it was used in stock synthesis.

This shows that the data used in that Batchelor et al paper consistently had a higher proportion of recaptures than in the stock synthesis data. This kind of suggested that possibly to explain the discrepancy in the reporting rate estimates is this data. They were using the two different analyses. What we did is we went back and we tried to manually adjust the recapture data to match the recapture rates in the Batchelor et al paper.

But that did not have much effect on the model estimates, and actually those recapture rates had to be increased significantly before this tag recapture data agreed with the other data components and stock synthesis, while returning a reporting rate that was much more expected, given the published literature studies.

These other runs for the southern stock, the sensitivity runs, these are the annual SPR estimates, with the black lines showing the SPR estimates from the base model that was presented to the board. The dotted black line is the SPR estimates from the model with no tag recapture data. You can see again there is little influence of taking that tag recapture data out.

The blue line is the model run with reporting rate fixed at 18 percent. The red line is the model run with the reporting rate fixed at 60 percent, and then the dotted blue line are the SPR estimates from SEDAR 18. This model had a little bit more of the expected response to fixing that reporting rate, where it generally scaled the estimates up and down and more of a gradient as opposed to two very drastically different solutions that the model was kind of going back and forth to.

The conclusions after looking at these different analyses. The tag recapture data currently have little influence in the SS3 models, unless reporting rate parameters are fixed. Specifically for the northern model, fixing reporting rate parameters indicated model instability; when looking at the likelihood profiles.

Some conflicts in other data components are likely contributing to this model instability. The recommendation, moving forward, is to not to include tag recapture data in the current SS3 models, with fixed reporting rates. It is noted that the data conflicts that were observed need to be addressed before including the tag recapture data with fixed reporting rates.

The last task. The statistical catch-at-age continuity runs, the board asks for an investigation of whether the previous statistical catch-at-age model would be useful for management, and if so, to conduct a continuity

run for both regions. The board does not specify if the continuity run should only contain data sources using SEDAR 18, and leaves it to the discretion of the investigators to incorporate new data sources as they see fit. If it is believed additional data sources will significantly improve the performance of the statistical catch-at-age model, the board encourages these additions. We did review the statistical catch-at-age model runs with data through 2013, which was our terminal year used in the stock synthesis modeling and carried forward for this analysis.

The data changes were minimal, but they do include the addition of longline surveys now within the model, which index the adult relative abundance and also some changes to the juvenile index choices in the southern stock. The recommendation from reviewing the model estimates from this modeling framework is to use the updated statistical catch-at-age model, not as a continuity analysis, but rather as a preferred model for management advice.

This is based on some of the things that we've gone over reviewing these tasks. The data conflicts we've seen within the different data components of the stock synthesis model, and the need to determine the appropriate treatment of these data conflicts. Then also the departure of the SS3 model estimates from literature estimates, the SEDAR 18 estimates, and now the updated statistical catch-at-age model estimates.

I did note some data changes to the model relative to how it was configured for SEDAR 18, and so that will require a peer review. We'll be providing the results from these model runs to peer review for their determination on whether this is useful for management advice. We hope to provide the results of the models and the review to the 2017 ASMFC Winter Meeting. Just to bring it back and provide a summary of the recommendations. The Technical Committee recommends maintaining the SPR reference points.

They recommend against managing red drum solely using juvenile F based reference points. They do endorse the continuation of using age-structure models, and they suggest reviewing the updated statistical catch-at-age models for management advice; and recommend to not use the SS3 model estimates until data conflicts and parameter discrepancies are resolved. That concludes my presentations and I'll take any questions.

CHAIRMAN ESTES: Jeff, thank you very much for a lot of work. Are there questions? I would like to pose maybe a question to the board. Roy.

DR. CRABTREE: If we follow all of that advice and we use the statistical catch-at-age model for management advice, where does that leave us in terms of the status of the northern and southern stock; relative to overfishing?

MR. KIPP: I did not include results of the model runs in the presentation here today, just because I think the group feels that it is appropriate for the results to go to a peer review first, to get their recommendation on whether those would be useful for management or not; before providing those results.

CHAIRMAN ESTES: Other questions? You note that the data that were used here go through 2013. I think there's a question about whether we would like to have that updated through 2015 if possible, and then maybe if that is important, discuss the timing and about how we would do that. Robert.

MR. BOYLES: I was just going to go ask that question of Jeff or Toni. Can you give us a sense of timing on if we were to update the statistical catch-at-age model with data through 2015, what kind of timing we would be able to get to Dr. Crabtree's \$64,000.00 question?

MS. KERNS: If we do not update the data and we just use data through 2013, we can get you the results of this peer review assessment in February; but it would only be through 2013. If we wanted to update the data and then give you

the results, it depends on how much time it will take the states to pull that information together; what type of priority you give your staff to work on that whether or not we could get that completed by the May meeting or the August meeting.

I think we can definitely do it by the August meeting, potentially by May. I think you have two avenues that you could move forward, and both avenues I think by updating the data it would either be May or August. You could follow sort of what we did with Tautog, where we had an assessment.

It was through an earlier time set, so go ahead and do it, the review; get the results with the 2013 data in February, and then immediately do an assessment update with the most recent data; which wouldn't need to be peer reviewed later. The flip side is you could task the group to get the new years of data, include it and then do your peer review. That peer review would come either May or August. In either case the most recent data would be May or August, depending on your staff's time.

MR. BOYLES: Speaking very parochially, this is a very important fishery for us in South Carolina. I think everybody recognizes that. Either of those timeframes, as you all know; you have heard me pontificate before about our legislative process. Our legislature goes home in May this year.

All else equal, given the fact that we won't have anything for us necessarily to have in our pocket as we go talk to our general assembly, I think I would just as soon update it through 2015. That would be my sense, and have the most up-to-date information that we have, so that should we need to make additional management changes we've got the benefit of the most recent data.

CHAIRMAN ESTES: Other comments about that issue? Are there any objections to updating it through 2015?

MR. CHRIS BATSAVAGE: I'm still kind of mulling through the options, the one given that was similar to what was done with tautog seems intriguing, since this has been a pretty long process to get where we are today. You have a peer review assessment in place, and then we can start soon after that on a data update.

Possibly one advantage of that is if we're into 2017, it could include 2016 information, as well. The other side of it is although data through 2013 is a little old; this is a long-lived fish. It probably lends itself better to red drum as opposed to say spot, where it would be a couple of generations past. I guess the question for whichever scenario is, how will that impact other stock assessments that are currently being done by the commission?

MS. KERNS: Most of this work has been done by Angela out of Maryland, and so that would be a question to Lynn of what her workload is. Jeff has been helping her with a couple of parts of this, and Jeff is essential in a couple other assessments that we're moving down the line. If Angela takes the brunt of that work to update, I can't answer that question. But you all have staff members that would need to be updating their datasets, and you all know how long that can or cannot take. As I said before, it would be how much of a priority you would give your staff members to work on those.

MS. FEGLEY: Really, Angela and the team as a whole, they're our heroes. They have been working very hard on this. I can't answer right now what Angela's ability would be. I would need to go back and circle back with her. I might need to medicate her. We can certainly follow up, however you want us to follow up, by e-mail or however to see what we can do.

MR. CIMINO: I would be remiss if I didn't just say thank you to everybody. There was an incredible amount of work put into this, and we would certainly do whatever needs to be done to help Angela with the update of the northern model. I just wanted to make one plug, I think, and I

wouldn't stand against a motion from Robert in the opposite direction.

But for a path forward like tog, because I think it would give staff a chance to know whether or not we have any major errors and what we're dealing with before we put more work into this. There has been an incredible amount of work. If the peer review says what was done is solid, and now going forward, all we have to do is that update. I think I am pretty comfortable with that procedure.

DR. CRABTREE: This is certainly an important assessment. There is not getting around it, 2013 is getting to be a concern. But I do think this is something that we're going to need to begin to deal with the management implications sooner rather than later. I hope that we can find a path forward that allows us to begin talking about what actions need to be taken to deal with some of these issues as quickly as we can.

CHAIRMAN ESTES: Any other questions or comments before I try to summarize things? It sounded like what I heard was some interest in getting a review of the data through 2013, then immediately following up and update that through 2015 or 2016. Does that satisfy everyone? If not, let's discuss it some more. Any objections to that plan? Jeff, does that give clear direction?

MR. KIPP: Yes that's clear, thank you.

CHAIRMAN ESTES: Thank you very much for your work. Next agenda item is Jeff again; he's going to give a progress update on Spot and Croaker Stock Assessments.

PROGRESS REPORT ON SPOT AND ATLANTIC CROAKER BENCHMARK STOCK ASSESSMENTS

MR. KIPP: Since I last gave an update at the August meeting, we had, right after that, a second assessment workshop in August at our office in Arlington, and we also have had several progress calls since that assessment workshop. Right now, we're putting the final touches on a

two-stage catch-survey analysis type model for spot and a stock synthesis model for croaker. We'll be having a few more calls to review that work and the additional work that needs to be done for those modeling approaches, and then putting that information into the final report; which will go to the Technical Committee, and then subsequently to peer review and then we'll be scheduling the peer review. If there are any questions on those assessments, I can take those now.

CHAIRMAN ESTES: Any questions on that? Seeing none; we'll roll right along. I think the next agenda item is Plan Review, and Amy is going to give plan reviews for Spanish mackerel, black drum and spotted sea trout.

CONSIDER FMP REVIEWS AND STATE COMPLIANCE FOR SPANISH MACKEREL, BLACK DRUM AND SPOTTED SEA TROUT

MS. AMY HIRRLINGER: We're going to go over the Black Drum 2016 FMP Review. This covers both the 2014 and 2015 fishing years. The following graphs represent black drum harvest within the management unit from New Jersey to Florida. Looking at total harvest, I wanted to point out a recent 2012 low point of less than one million pounds.

After a spike in 2013, landings again dropped 21 percent to 1.42 million pounds in 2014, which is under review, and then remained relatively constant in 2015 at 1.48 million pounds. These past two years have been about 30 percent below the previous ten-year average, which was inflated by the 2008/2009 recreational harvest spike.

Commercial harvest is relatively stable, accounting for 19 percent and 16 percent of the total in 2014 and 2015; 2014 landings decreased 8 percent from the previous year and then dropped again by 9 percent to 238,000 pounds in 2015. Florida and Virginia led the 2014 commercial harvest and Virginia led the 2015 harvest with 39 percent.

Recreational landings indicate that fewer but larger fish are being caught in recent years. The number of fish harvested continues to drop at 166,000 fish in 2015. The catch in pounds actually rose last year to 1.25 million pounds, so this decrease in numbers can be attributed to the establishment of minimum sizes by the 2013 FMP, but the increased poundage is likely due to increased monitoring in the Mid-Atlantic region.

The 2015 harvest represents a 62 percent decrease in numbers bringing a 35 percent decrease in pounds from the previous 10-year average. Florida anglers landed 60 percent in 2015 recreational harvest. That is the longest slide we have out of all of these. Hopefully, we can get through the rest of this pretty quick.

The yellow portion of the bar shows the proportion of recreational harvest that was released. Percentage of releases has increased drastically over the last few years. From 47 percent released in 2013, releases increased to 71 percent in 2014, and again to 90 percent in 2015. Actual releases totaled 720,000 in 2014 and 1.5 million in 2015.

The recreational discard mortality is estimated at 8 percent. We can also attribute the steep increase in releases to the minimum size established by the 2013 FMP. The yellow portion of the bar shows the proportion of recreational harvest that is released. In the interest of time we can just say the FMP requires states with a declared interest to implement a maximum possession limit by 2014, and a minimum size limit of 14 inches or more by 2016. Sorry about the technical difficulties.

The PRT pulled the state specific requirements; also, it is not the possession and size limits stated by the FMP. Is that going to go now? As seen in the previous slide, the PRT finds that all states have implemented the FMP requirements and also no state requested de minimis in either 2014 or 2015. After that, hopefully, it's not too confusing review. Are there any comments or questions?

CHAIRMAN ESTES: Questions? Any actions anybody would like to take? Would you like to accept the FMP review and grant de minimis to the states that she pointed out?

DR. MALCOLM RHODES: I move that the board accept the Spanish mackerel compliance report as presented or the FMP and compliance report for black drum, I'm sorry.

CHAIRMAN ESTES: Do I have a second, Wilson. **Okay, so the motion is to move to accept the FMP review and compliance reports for the black drum 2014/2015 fishing years; motion by Dr. Rhodes and seconded by Dr. Laney. Are there any objections to the motion? Seeing none; the motion passes unanimously.** Okay, Amy, next.

MS. HIRRLINGER: Now we're going to go over the Spanish mackerel FMP review, which covers the 2015 fishing year. Total Spanish mackerel landings in 2015 are estimated at 3 million pounds, which is a 1.4 million pound decrease from last year, and both commercial and recreational landings have been in general decline for the past few years, aside from a few upticks.

The commercial fishery harvested approximately 7 percent of the total, and the recreational fishery about 30 percent. Coastwide commercial landings have generally been below 4 million pounds since 1995, which was when Florida banned entanglement nets, since they are historically the largest harvester.

Coastwide commercial harvest in 2015 totaled 2.3 million pounds, a 1 million pound decrease from the previous year, and Florida is responsible for 75 percent of the harvest. Now check out the trending recreational landings, because we're about to break that down. Recreational anglers harvested about 628,000 Spanish mackerel or 695,000 pounds in 2015.

This is a 29 percent decrease from last year and a 44 percent decrease from the local 2013 peak of 1.1 million pounds. North Carolina recently

passed Florida to lead recreational landings with 61 percent in number of fish in 2015, and South Carolina also passes here at 21 percent, leaving Florida in third with 13 percent.

This is the first year that South Carolina is responsible for a larger portion of the recreational landings. The percentage of recreational releases has generally increased over time, and was higher than ever before in 2015 with 65 percent of the fish released. A stock assessment was completed through SEDAR in 2012, which incorporated data through 2011.

It determined that the stock is not overfished or experiencing overfishing. To save time, here are the commission's regulations for Spanish mackerel; it includes the minimum length, bag limit and commercial trip limit. But the one important thing to note is that Addendum I introduced a pilot program which allows states to reduce the minimum size of their commercial pound net fishery from July to September.

They can lower the minimum size to 11.5 inches to reduce discards of slightly undersized fish. The reason why I brought that up was because North Carolina implemented this pilot program, and they did so from July 4th to September 30th. The state regulations table behind me is meant to illustrate that all the states are complying with the minimum size recreational creel limit and commercial trip limit. The PRT finds that all states have implemented the requirements of the FMP. Also in New Jersey, Delaware and Georgia request de minimis status, and the PRT notes that these states meet the requirements; and that's it.

CHAIRMAN ESTES: Questions, comments, actions? Malcolm.

DR. RHODES: I'll try not to have a technical glitch. I move that the board accept the Spanish mackerel compliance reports and FMP, noting that Georgia, New Jersey and Delaware be granted de minimis status.

CHAIRMAN ESTES: Second. John Clark. Malcolm, are you okay with saying approve de minimis?

DR. RHODES: Yes.

CHAIRMAN ESTES: The motion is move to approve the FMP review and compliance reports for Spanish mackerel 2015 fishing year, and approve the de minimis status for Georgia, New Jersey and Delaware. **Motion by Dr. Rhodes, seconded by Mr. Clark. Are there any objections to the motion? Seeing none; the motion passes unanimously.** One more time, Amy.

MS. CIMINO: Mr. Chair, before we move off Spanish mackerel, it was on the same timeline, well, the last SEDAR assessment timeline was the same as cobia; so I was just wondering if we could get an update on when Spanish mackerel may be coming back around.

MR. CARMICHEAL: We were looking into probably trying to do a standard assessment, so an update of Spanish in a couple years. I think it was fitting in either 2018 or 2019.

MS. HIRRLINGER: Okay, last one; Spotted Sea Trout 2016 FMP Review covering the 2015 fishing year. The following graphs represent sea trout harvest within the management unit from Maryland to Florida; 2015 saw one million pounds landed in total, which is 0.8 million decrease from 2014.

Commercial landings seen in blue here were 175,000 pounds, roughly half of last year's commercial total. All states saw a decrease in commercial landings except for South Carolina, which increased their commercial landings. Florida accounted for about a third of the total coastwide catch last year, and North Carolina came in second with 27 percent.

Leaders in commercial landings were North Carolina with 73 percent followed by Florida with 22. Check out the trend in growing recreational landings and the low point you see

in 2015, because the next slide will break that down. The following graphs represent sea trout harvest. Here are the recreational landings broken down by harvest and release.

Looking at catch in black, you can see a general upward trend 20.8 million fish peak in 2012. This is followed by a declining recreational catch over the past few years, so right now we're at a local low point of 5.7 million fish in 2015. Recreational harvest, which you can see in red, has remained relatively stable throughout the time series with a 1.3 million fish average, but over the past few years, we have seen a decline with a record low in 2015 at 534,000 fish.

This is 52 percent lower than last year, 71 percent lower than the 2012 peak; and Florida and Georgia both led this harvest with about 30 percent each. The low harvest in the past few years could be attributed to a recent increase in releases, which you can see in green; and these are on the rise, partly due to increasing catch-and-release trends as well as season closures and size and bag limits in place. The highest release percentage ever seen was in 2015 at 90.6 percent, and the previous 10 year average has been about 80.

The 12 inch minimum total length required by the 2011 amendments shows that all states have complied. The PRT finds that all states have implemented requirements of the FMP. Also, New Jersey and Delaware request continuation of de minimis status, and the PRT notes that these states meet the requirements of de minimis; and that is the end of the presentation.

MR. BOYLES: Amy, did you suggest spotted sea trout commercial landings are up in 2015 in South Carolina?

MS. HIRRLINGER: Let's take a look, let me see. In South Carolina commercial landings, according to the data that was submitted with the compliance reports did increase in 2015. Do you think something different? Because I can check that.

MR. BOYLES: We've not changed spotted sea trout regulations in a number of years, and it's a game fish. Hmmm. We'll have to look into that.

MS. HIRRLINGER: I can look at that and get back to you, yes I'll check that out.

MR. ROY MILLER: Amy may not be able to answer this, but I'm just curious if we know why there is an increasing trend in releases of spotted sea trout, when my recollection is that management has been fairly constant over the years for that particular fishery, or at least since early 2000s, anyway.

CHAIRMAN ESTES: Does anybody want to try that?

MS. KERNS: Roy, we can bring it back to the PRT and ask them if they have any information on why they think we're seeing these shifts and come back to the board at the next meeting and follow up.

MR. MILLER: Yes, it just kind of out of curiosity, I'm wondering if it's a paradigm shift in the way people fish or whether it's something else going on here with the increased number of releases.

MR. BATSAVAGE: I'll try to answer, at least from the fishery in North Carolina; 2015 we had another cold stun event that had an impact on the legal size fish, and actually had a cold stun in 2014 as well. The landings in North Carolina went down as a result of that. There was a pretty decent recruitment following up, which most of those fish were below the minimum size limit, and the releases were high.

In 2016, I think we'll see that those fish have moved into the minimum size limit and our harvest will be higher this year than it was last year, and probably 2014, as well. The other point, too, is although there really haven't been very many changes at the ASMFC level, as far as regulations go, the states have made changes, and North Carolina increased their minimum size limit from 12 inches to 14 inches around 2009

plus or minus a year. That certainly had an impact on the harvest in our state.

MR. CIMINO: Just a follow up. Virginia did decrease the bag limit, but I also think that there has been an increasing trend in the fishery for catch and release, as well.

CHAIRMAN ESTES: Any other questions, Dr. Rhodes, did you have something? In fact, I think we already have maybe typed up what you were thinking, if you'll just wait for a second.

MR. BOYLES: **Mr. Chairman, I would move to accept the FMP review and compliance report for spotted sea trout for the 2015 fishing year and approve de minimis status for New Jersey and Delaware.**

CHAIRMAN ESTES: Do I have a second? Pat Geer. Okay, so the motion is to move to accept the FMP review and compliance reports for the spotted sea trout 2015 fishing year and approve de minimis status for New Jersey and Delaware; motion by Mr. Boyles and seconded by Mr. Geer. **Are there any objections to approval of the motion? Seeing none; it passes unanimously.** The last item on our agenda. Shanna is going to give us an update about SEAMAP funding.

SEAMAP FUNDING UPDATE

MS. SHANNA MADSEN: I'm going to make this brief and depressing. Funding updates are not usually good. SEAMAP decided that we wanted to give a quick date to the South Atlantic Board regarding our funding. Just as a reminder, ASMFC actually coordinates the portion of the program in the South Atlantic, but SEAMAP also includes stretches through the Gulf and Caribbean, as well.

The graph that you're looking on at the screen is our overall funding for all three of those components. Obviously, since SEAMAP South Atlantic Data supports a lot of the management species in the South Atlantic Board, we thought that it was important to kind of bring some of our funding issues to your attention.

If you'll look at the graph on the screen, it represents our funding over the past few years. Our congressional appropriation to the overall program is the one that is represented in blue, while the actual funds that our program receives are in red. As you'll see, although our congressional appropriation has increased since 2013, the amount available to our surveys to actually collect the data is decreasing.

One of these reasons is because the taxes and assessments that are being levied on the program now constitute about 16 percent of our budget, when back in 2014 they were only about 5 percent. SEAMAP is also recently struggling with the impacts of just level funding. Obviously, as survey costs increase, personnel costs increase, and being consistently on level funding obviously causes a lot of funding gaps that we're trying to address.

Throughout the years, SEAMAP has historically depended on a lot of historical funding sources from either states or other granting agencies to maintain their current capacity; but obviously those funding sources are seeing a lot of the same cuts and starting to dwindle, as well. The reductions in our funding have definitely impacted our surveys greatly.

You know, that can come out as reductions in sea days, reductions in the number of stations sampled, and sometimes we're getting rid of entire programs. Essentially, the slides that I have following are going to kind of briefly outline some of the reductions that we're seeing in our SEAMAP programs since 2011.

The first. The coastal trawl survey has been in effect since 1986. It's providing long term fishery independent data, seasonal abundance, biomass; and the survey overall has provided data to Spanish mackerel, menhaden, spot, croaker; just to name a few of the species. With the reductions that we've seen in funding there, we've actually cut our sampled stations from 201 to 112. We also saw a large reduction in the collection and processing of important life

history information, including the elimination of all of our diet studies for that survey.

Essentially, should SEAMAP funding remain level or continue to decrease, we're starting to think about losing one of our entire sampling seasons. We usually hit spring, summer, fall; we would get rid of one of those. Next, focusing in our reef fish survey, reef fish survey data has been included in stock assessments for black sea bass, blueline tilefish and a lot of various species in the snapper grouper complex.

Unfortunately, with the reductions in funding available to this survey, we've completely eliminated our gag ingress sampling component and reduced our sea days down from 35 to 19. We expect that should our funding remain level, this survey should see a further reduction in sea days or the loss of their entire longline sampling component.

They are also considering decreasing a lot of their life history processing. Overall, the impact on our coastal longline surveys, which are the ones that are collecting all that useful data for red drum and coastal sharks. We've seen in South Carolina, we've already reduced our sea days from 15 to 10.

Should SEAMAP remain at a level or decreased funding, we've discussed making a lot of changes to the Georgia Longline Survey, either reducing our sea days by half, modifying how we sample, or getting rid of entire sampling season or area. In North Carolina they're discussing reducing their sea days by about a week.

Some of our plans that we're going to do to try to tackle some of these issues is we are going to meet with the SEAMAP South Atlantic Committee, this is our Oversight Committee, and we'll meet in conjunction with some of the survey leads from our coastal surveys, and from our longline surveys; to discuss how we want to modify these surveys based on our budget constraints.

These aren't good modifications. It is important to note that we really don't know what's going to happen if we continue to reduce sea days and reduce stations sampled, because obviously we're losing all of that data; and that might have some unintended consequences on a lot of the stock assessments that this board is going to see in the future.

It is also worth noting that many of our surveys do anticipate an increase in their personnel cost, due to the fair labor standards act. I know a bunch of the states are facing the same issue. We might face further sampling reductions in the future, should our funding remain level or decreasing.

Essentially, since you all know where our data is coming from and it's supporting the management of the species on this board, we just wanted to bring these funding issues up front and center, to let you all know what the situation is. We are definitely, as you see in the spring, and we're going to start to discuss how to put together maybe a few letters to potentially reduce some of the taxes that are being levied on the SEAMAP program. But it's not going to cover a lot of the gaps and a lot of the struggles that we're already facing. With that, I am going to let you all be sad for a little while.

MR. CLARK: I was just curious. Where is that 16 percent in taxes going?

MS. MADSEN: Essentially, what happened was, before when we were about at the 5 percent we were only being taxed through headquarters. We were lucky enough that the Southeast Fisheries Science Center was not imposing any overhead on us, which they technically can. But just recently, they were told that they had to, and that's where the large increase in taxes is coming from.

MR. BOYLES: Shanna, thank you for the excellent presentation and representation of what's going on with SEAMAP. A question for Bob, perhaps; Bob, we learned a lot, I think, meeting with NMFSS leadership back in August, and even at

the state directors meeting that perhaps one way to address this is to get programs like these added to the ATBs, the adjustments to base, it's part of the NOAA budget. Is that a realistic avenue for us to perhaps begin chipping away at this erosion of buying power?

EXECUTIVE DIRECTOR ROBERT E. BEAL: I guess the answer is hopefully. We've been focusing on Atlantic Coastal Act for the most part recently, to try to get that adjusted and more consistent with the increase that that line item has seen in the budget. We have not focused a lot on SEAMAP yet; however, Dave Donaldson from the Gulf States Commission and Randy Fisher from the Pacific States Commission and I will be meeting with the appropriations staff next Thursday, I believe it is, Deke.

One of the common areas that Dave Donaldson from the Gulf and I always bring up is SEAMAP. One of the priority areas, it affects the Gulf obviously and the Caribbean and us, and it is one of the priority areas that we try to convey the importance to the appropriations folks on the Hill.

We'll do that. I think I'll pull some of the pieces out of Shanna's presentation and let them know that where we are right now, there are real world cuts, things are disappearing pretty quickly. Stock assessments will be impacted and the ability to manage these fish will be impacted. We'll keep working on it. It's a pretty tight time to get money out of the Hill right now, but we'll just keep trying.

CHAIRMAN ESTES: Any other questions? Shanna.

MS. MADSEN: I just wanted to mention that in your meeting materials, there is actually a letter that outlines in further detail the cuts to both the South Atlantic and the Gulf programs, if anybody is interested in seeing those in more depth.

CHAIRMAN ESTES: There will be more discussion about this issue, I expect, in February when we

meet. Is there any more business to come before the board? Oh, Tina, I am sorry; I forgot.

**REVIEW AND POPULATE ADVISORY PANEL
MEMBERSHIP**

MS. TINA BERGER: I just want to quickly go over -- you have four new nominations to the South Atlantic Species Advisory Panel, they are Aaron Kelly from North Carolina, Bill Parker from South Carolina, Glen Ulrich from South Carolina and Lee Southward from Georgia; and I present them for the board's approval today.

CHAIRMAN ESTES: Okay, do we have a motion? Malcolm.

DR. RHODES: I move the board accept Captain Bill Parker, Glenn Ulrich, Lee Southard and Aaron Kelly to the South Atlantic Advisory Panel.

CHAIRMAN ESTES: Second, Chris. Is there any objection to the motion? Seeing none; it passes unanimously.

ADJOURNMENT

CHAIRMAN ESTES: Now let me try again, is there any more business before the board? Seeing none; do I have a motion to adjourn? I see Pat; we're adjourned, thank you.

(Whereupon the meeting adjourned at 12:36 p.m. on October 25, 2016.)