

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

**The Crowne Plaza Hotel – Old Town  
Alexandria, Virginia  
August 7, 2014**

**Approved February 4, 2015**

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August 2014**

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7. **Adjourn by Consent** (Page 16).

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**ATTENDANCE**

**Board Members**

Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Louis Daniel, NC (AA)
Russ Allen, NJ, proxy for D. Chanda (AA)	Robert Boyles, Jr., SC (AA)
David Saveikis, DE (AA)	Patrick Geer, GA, proxy for Rep. Burns (LA)
John Clark, DE, Administrative proxy	Spud Woodward, GA (AA)
Tom O'Connell, MD (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Bill Goldsborough, MD (GA)	Martin Gary, PRFC
Joe Grist, VA, proxy for J. Bull (AA)	Wilson Laney, USFWS
	Steve Meyers, NMFS

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

**Ex-Officio Members**

**Staff**

Bob Beal	Melissa Yuen
Kirby Rootes-Murdy	Toni Kerns

**Guests**

Harry Rickabaugh, MD DNR

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The South Atlantic State/Federal Fisheries Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel Old Town, Alexandria, Virginia, August 7, 2014, and was called to order at 12:55 o'clock p.m. by Chairman Patrick Geer.

**CALL TO ORDER**

MR. PATRICK GEER: Okay, let's get started. My name is Pat Geer; I'm the chairman of the South Atlantic Board.

**APPROVAL OF AGENDA**

MR. PATRICK GEER: The first order of business is approval of the agenda. Are there any additions or changes to the agenda? Seeing none, we'll consider it approved.

**APPROVAL OF PROCEEDINGS**

CHAIRMAN GEER: The second item is approval of the minutes from the May 2014 meeting. Any changes or any modifications? Hearing none; we will consider that approved.

**PUBLIC COMMENT**

CHAIRMAN GEER: The next item is public comment. Does anybody have any public comment? Item Number 4 is an update of our triggers for spot and Atlantic croaker exercises. That is going to be done by Harry Rickabaugh.

**SPOT AND ATLANTIC CROAKER  
TRIGGER EXERCISES UPDATE**

MR. HARRY RICKABAUGH: I want to quickly go through the current trigger analysis for both Atlantic croaker and spot. Starting with croaker, this was originally and still is an assessment trigger. It was designed to initiate a stock assessment in a non-assessment year. There is only one hard trigger. It is the commercial and recreational landings.

If either of those drop below 70 percent of the previous two-year average, that is the hard trigger that actually initiates a stock assessment. The technical committee also reviews biological data, commercial and recreational effort, and some independent indices. If the technical

committee feels that those are showing something alarming, we can also recommend that a stock assessment be done ahead of schedule.

As I mentioned, the hard triggers are both commercial and recreational landings. The way it would work for this year is the 2013 landings would need to be less than 70 percent of the average of the 2011 and 2012 landings. Going through those, we'll look at the commercial first. The red bars on this figure indicate years in which the trigger would have tripped.

As you can see, 2013 did not trip. The landings in 2013 were I think just under 10 million pounds; and the average for 2011 and 2012 were 11.9 million pounds. You will notice in the red oval area that the landings have been declining steadily for the last ten years, but never at a rate quick enough to trip the trigger.

This is something that concerns the technical committee with this particular trigger is that you could have this continue on and we would never actually have a trip. One thing, if you look real quick, between 2010 and 2011 you'll see there is quite a big drop. That actually almost tripped that year.

Later on when we're looking at individual states' landings and effort, I'll point out to you something with North Carolina that will show what part of that is. It still would have declined, but some of that is due to a reduction in effort in the fly net fishery in North Carolina. Looking at the recreational landings, again the same thing; the red bars are the years it would have tripped.

2012 and 2013 both increased; so the trigger did not trip in 2013. You can see there are a couple of time in recent history that it would have. Okay, this is commercial catch and effort for the major gears for Virginia. The next few graphs will be similar to this one where the bars are the annual landings and the black squares are the effort data.

For both Virginia and North Carolina, which will be the next slide, in general you will see that the landings and effort most increased through

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the late 1990's, held steady for a while, and then decreased to end of the 2000's. In recent years it kind of started to level off at a low level. If you were going to do a catch-per-unit effort on this, that's what you would see.

The reason we didn't is this effort is actually positive trips. We have no way of knowing which trips were targeting croaker and caught none. For North Carolina, again the same similar pattern for most of the fisheries where you have a little bit of a decrease in landings in recent years. You can see the second panel down is the fly net; and apparently at the end of the 2010 season, the hurricane season disrupted or changed the inlet in such a way that the fly boats have trouble getting in and out now; so that effort has actually been reduced for that reason.

Actually in 2013 they only made one trips. That would be approximately almost 3 million pounds. If you look at the previous three-year average, it about 3 million pounds per year; but it was kind of lost just due – potentially lost for effort only. Even if you add that back on, every year it still declines. 2010 would decline for 2011; just not the same magnitude.

Florida, there are smaller gears. If you look on the margin, this is in thousands of pounds and hundreds of trips as opposed to millions of pounds and thousands of trips with the other two states. These gears tend to track. Effort and landings track together. With the hook and line, the catch-per-unit effort would have increased the past few years and been more similar to the late nineties; but other than that it follows kind of a similar trend where it is kind of more leveled off.

Again, these are smaller fisheries so they're more mobile and not showing as much of a trend. Okay, the several slides will be the independent indices. This one is the VIMS Trawl Survey. This is a juvenile survey done in Virginia's portion of the Chesapeake Bay and their tidal tributaries. All these indices over the next four indices are the ones that were used in the 2010 stock assessment. That is why the technical committee focuses on these.

The black line with the blue diamonds; that is the one that was actually used – the formulation of the index that was used in the last assessment. VIMS personnel looked at it and these couple of peaks, especially one around 2009, were determined to be large catches from the bay that aren't typical; so they also ran the index just for the rivers.

That's that olive green line; and you'll see it does take out a couple of those really extreme peaks. You still have – if you look at the last three years, 2011 would have been a very low year; 2012 looks like a very good year class; and then it's kind of average this past year in 2013. The next one is the North Carolina Trawl Survey. This is also a juvenile trawl survey.

There is a little more variability in this one. It doesn't match up perfectly; but if you look at the last three years, you still have that same very low 2011, high 2012 and a little bit above average 2013. Of course, North Carolina also shows a very, very strong 2010 year class that didn't show up in Virginia. This is one of the reasons why the technical committee included both of these as it's two of major nursery areas; and you could have differences between them.

When you combine them together, you get a better picture of the overall potential recruitment. Again, both of those were above average. The next two are the offshore trawl surveys, NMFS and SEAMAP. Both of these surveys do catch all age classes from zero through large adults, but primarily catches age three and under – actually under three; so it is a little more skewed towards younger fish as opposed to older fish where the commercial landings are generally age three-plus.

They are focused on slightly different portions of the adult population. You can see it's showing a different trend in the landings. It has increased in recent years; the last two years of decline, but 2013 is still above the long-term mean for the NMFS trawl. SEAMAP is a little more variable, up and down, above and below the mean. Again, the last of years have been relatively high. 2012 is the highest year on

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record and a decline in 2013 but still well above the long-term mean.

I'm just going to go ahead and go right through spot and then I'll take any questions on both, if that's fine. The spot triggers are a little different. This was designed as a management trigger. If this one should trigger, the PRT is to recommend to the board to take management action. That management action is not defined, but it is just to be recommended to the board.

You need two indices to go below the 10<sup>th</sup> percentile of its long-term mean; one of which has to be fish independent. You can see they are the commercial and recreational landings, the NMFS and SEAMAP trawl, and the Maryland Juvenile Seine Survey. First we'll look at the landings. This is both the commercial and recreational landings.

The commercial is the solid blue line; recreational is your red dashed line. Pretty clearly the landings were much higher. They have always been variable. That is not too surprising with spot. It is a short-lived, highly variable recruitment species. You can see it declines and it doesn't hit the same highs once you get into the nineties; and it has declined through the 2000's.

Recently it has been cycling up and down annually with the downturns becoming lower and lower. Both 2012 and 2013 were below the 10<sup>th</sup> percentile; so for this particular index it is tripped; and you need another one to trip before the actual trigger itself goes into effect. You can see the recreational landings, the same thing; they're even more variable.

You do have a big peak there around 2007. It increased in 2013, but it is still below the long-term mean but above the 10<sup>th</sup> percentile. For the trawl surveys, the next two will be the same two trawl surveys for croaker, NMFS and the SEAMAP. There was a little bit of an increasing trend with the NMFS trawl.

You can see there is a low point in the late 1990's/early 2000's and a couple of large peaks after. 2013 was three times lower than 2012, but

2012 is such a high year you're still well above the 10<sup>th</sup> percentile. This one is not going to trip. Similarly with SEAMAP; more variable; there is not a real trend with SEAMAP; but it also was above the 10<sup>th</sup> percentile and not fully agreeing with the commercial landings, which was going in the other direction.

This the Maryland Juvenile Seine Survey. We picked one juvenile survey for this one because we actually did some correlation analysis; and a different juvenile indices actually tracked each other very well through much of the range, particularly the Mid-Atlantic north. The Maryland Seine Survey had the longest time series.

As you can see, it was very high in the 1970's, basically cycling up and down as you would expect, but getting lower and lower into the 2000's. We've now had a couple of big peaks in there, but we did go below the 10<sup>th</sup> percentile in 2011; rebounded a little in 2012; dropped again in 2013, but maintained just above the 10<sup>th</sup> percentile; so it did not trip either.

Basically the spot trigger did not trip, but the commercial landings are very, very low. They're below the 10<sup>th</sup> percentile. Recreational remains fairly low. The Juvenile Index is near but not at those low levels while the two offshore surveys are fine; so the trigger does not trip. Both the Croaker Technical Committee and the Spot PRT don't feel either one of these triggers do a great job of tracking these species through time and initiating management at the appropriate time; particularly the croaker since it was actually designed as an assessment trigger.

It's looking for a sharp decline, which what we would really want to probably take management on is more of a sustained long decline. Also, they're single-year triggers. In other words, if you have a really bad year, it could trigger and you're not really looking back at what you had before. This is one of the reasons why the PRT and the technical committee prefer the traffic light because then you have multiple years, two years in case of spot, three in the case of croaker, where you have to have a certain proportion of red.

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Those proportions of red, of course, are going to encompass multiple surveys; so it is more of a general decline you would have to have for those to initiate it; and it gives you a better picture of the long-term situation and not just the short term. Both of these indices, because they're based on either the long-term average or just a short-term average, can continue to decline and basically it's a moving target. You keep getting a lower and lower benchmark you have to hit. That's all I have. I'm willing to take questions.

MR. MARTIN GARY: Harry, a question for you. Outside of the abundance estimates in the various surveys, I was curious – I've heard word of some distribution of croaker in particular northward, and I know the ASMFC has had discussions about flounder and some other species shifting distribution.

Do any of your surveys pick up on a change in geographic distribution of that particular species, if you can address that? I don't know whether the New Jersey or New York folks – I've heard even stories that partyboats are targeting them up there now. I'm just curious about how the adults are distributing themselves.

MR. RICKABAUGH: We didn't look at it in detail, but a brief look at the landings, both commercial and recreational, don't show a large shift. There is not a lot of adult inshore surveys. We have the two trawl surveys. The NMFS survey does go pretty far north; and it is not showing any significant – we didn't really look by site by site.

You go strata by strata, I guess, and look over time and see if there is a shift. My feeling is I don't think you're going to see one based on the limited time I spent looking at that data. We don't have a real good dataset anywhere that is going to show us definitively yes or no. There are some, as you mentioned, anecdotal reports with guys catching spot in New York that don't usually catch them for a year or two. Some of that I think has abated, but there are some situations where those things are rising but nothing concrete.

MR. RUSS ALLEN: Yes; just to follow up on Marty's question, we haven't really seen any changes up in New Jersey. If you get a few winters that are somewhat warm, we'll have an explosion of young of year up there. We get some good spawning; and then that year class burns out and then it goes back to where it was. We haven't seen any major jump. It has pretty much followed the coast-wide assessment as Harry is showing.

CHAIRMAN GEER: Thank you very much, Harry.

**DRAFT ADDENDUM I TO THE SPOT  
OMNIBUS AMENDMENT AND DRAFT  
ADDENDUM II TO THE ATLANTIC  
CROAKER AMENDMENT 1**

CHAIRMAN GEER: Moving on to Item Number 5, Kirby is going to give us an overview of Addendum I to the Spot Omnibus Amendment and Draft Addendum II to the Atlantic Croaker Amendment 1. He is going to do a review of the addenda as well as the summary of the public comments.

MR. ROOTES-MURDY: I'm going to go through this fairly quickly as this is what will be approximately the third time we've reviewed the draft addenda. The main things I'll try to focus on are the public comments as well as an update to the traffic light that encompasses 2013 data as well as some of the surveys that were requested to be considered with the traffic light.

Just for background; the board initiated a draft addendum in February of this year. The board reviewed and approved the draft addendum for public comment in May. Public comment was open from May 28 until July 2. Today the board is tasked with considering a final action on the addendum.

For the statement of the problem, I'll just briefly mention off of what Harry had said through the trigger exercises, this process came about through concern by the technical committee and the plan review team that the management triggers were not adequately representing and accounting for trends that we were seeing in the

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fishery. Associated with that there wasn't an effective management program to respond to these trends.

For both species, in terms of understanding their life history and how these things might be playing a role, they're both small sciaenid forage species. They migrate seasonally along the coast. For croaker, the last coast-wide benchmark assessment we have was 2010; whereas, for spot we've never had a coast-wide benchmark stock assessment.

Again, the triggers have been concerning to the technical committee and PRT for some time. The other element is the degree of bycatch for both species and having not been able to fully quantify that in previous assessments has prevented the spot one from being conducted and thrown caution and concern to the ability to assess the true abundance of croaker as well.

The technical committee and PRT has been using the traffic light approach to assess these species; and that's what this addendum offers. Again, the main thing you're looking for here is that the proportion of green, the increasing of that is a positive trend away from the long-term mean of the reference period; whereas, an increase of the proportion of red is a decrease from that long-term mean. These are the two characteristics that we had included in the addendum.

Later on I'll highlight some of the traffic light characteristics that were not included just to give some more robust understanding of the trends we're seeing in the fishery and why they were not included at the time. Again, the two for croaker are the harvest and the adult abundance. The same are for spot, the harvest characteristic and the adult abundance.

Then again the addendum offered three management options; the first being status quo; that it would not move beyond what the current management triggers are. The second two would be using the traffic light approach with a management framework response; the first one being coast-wide measures that would be initiated based on either one or both of the

population characteristics exceeding their 30 percent threshold.

The third one would be taking state-by-state measures based on those population characteristics. I'm going to skip down through these unless there are any further questions folks had about those management options as they were listed in the addendum that was approved. I'll skip on to the public comment.

For the public comment, there public hearings held in June for the states of Maryland, Virginia, North Carolina and Georgia. Across those four states, 73 people attended. There were commissioners in attendance for a few of those as well. In terms of the written comments submitted, we had approximately – well, we had 117 written comments submitted; 116 of them were form letters.

Taking into consideration with them and the comments shared at those public hearings, we had 176 comments provided. For those form letters, predominantly they were received from the state of North Carolina. The one group that provided public comment was the North Carolina Fisheries Association.

In terms of the public comments' preference for the management options included in the addendum; the majority of the public comments were in favor of Option 1, status quo, for the following reasons; the first one being there was concern listed over the data used in the traffic light.

This ranged from which surveys were being included to the surveys that were included effectiveness and accounting for abundance as well as the survey scope and lack of local area representation; a lack of effort data included in the commercial landings as well as the role of market forces possibly impacting commercial landings.

Many voicing support for Option 1 requested that NEAMAP be included in the traffic light; and until done so, no other proposed management frameworks should be used. As I said, later on I'll show what the technical

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committee and PRT looked at in terms of NEAMAP and the traffic light. The next item that was hit on a lot was the cyclical nature of the abundance for both species; with regards to environmental factors playing a role in the abundance.

For a number of comments received, the view was that management measures would not effectively curb or promote abundance because of that element. Finally, the proposed management measures that were under consideration in Options 2 and 3; many took issue with those, notably the size limits that were listed and what were viewed as the impractical management measures.

Given the life history of both species, another concern was the potential economic impact that could come to fishermen and bait shop owners given the use of these measures. For those who were in favor of the traffic light approach, reasons given for in preference of it specifically in terms of Option 3 was the flexibility for states to respond in a local context based on their fishery and what most appropriate.

In terms of trying to consider whether the population characteristics that were included in the addendum, in terms of people being in favor of the traffic light approach, those who said they preferred the multiple characteristics approach rather than using one single characteristic, the idea being that with more information, more accurate decisions could be made. That's the summary of what the public comments we received are. If there are any questions, I'm happy to answer those now.

MR. JOE GRIST: I just wanted to make a comment on the public comment. After the public hearing in Virginia, we got quite a few calls in the office about the addendum. What we found was there was confusion in the way it was laid out. They took the tables that are on Page 9 and Page 12 of the addendum and took those measures in there such as closing the state areas from September through November or shutting down the gill fishery for two months as actually being what we were voting on today.

That is what produced a lot – I know at least for Virginia a lot of negative comments. Once we explained that wasn't what this was about; that it was about the trigger and it was about options such as state by state versus coastal; there was a little bit more agreement to it. We even met with our Finfish Committee one more time, the same group that Kirby came and presented to, and they had an understanding of it better the second time around.

Those two tables seemed to have caused some concern that what we were doing today was enacting measures to close. We have kind of dispelled that. I don't know if the other states had the issue, but we did find that in Virginia and since we've gotten a lot better public feedback on this document.

CHAIRMAN GEER: Any other comments or questions? All right, we're going to see an update of the 2013 preliminary numbers.

MR. ROOTES-MURDY: Moving down through the presentation, the technical committee and the plan review team wanted to update the traffic light approach for spot and croaker to better inform the board's decision-making. The first one is looking at the harvest characteristic with regards to updated information, including the 2013 landings.

Again, the harvest characteristic is a composite of both the commercial landings and the recreational harvest. The proportion of red actually increased for 2013. Again, this mimics the trend that was shown in Harry's presentation on the triggers; but with regards to the management options proposed, it is important to note that this exceeds that 30 percent threshold for three consecutive years.

If one population characteristic were to be utilized as opposed to multiple; this would trip and would require a management response. Regarding the adult abundance characteristic for Atlantic croaker, the 2013 data update, while 2012 had a significant increase in terms of the proportion of green, 2013 had a decrease in that, but still with a higher percentage than what the long-term average is.

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While the juvenile abundance was not included in the addendum because of concerns that the technical committee and plan review team raised regarding what juvenile abundance could actually demonstrate for the population on a whole, this is important I thought to present as it was raised – concerns that the local characteristic in the states of Virginia and North Carolina were not accurately or effectively being encompassed in the traffic light approach; but what the juvenile abundance does show is actually very similar what you see in the adult abundance.

So while it doesn't cover the same area; it is very much in line with what the adult abundance has been showing in recent years. Again, for the juvenile abundance, what we were using for these indexes was the North Carolina 195 Program as well as the VIMS Juvenile Index. The next item that was raised during the public comment period was the need to use NEAMAP in assessing both croaker and spot.

This was raised specifically at the Virginia public hearing that NEAMAP is now essentially conducting trawl surveys in the inter-strata that had formally been used by the NMFS Trawl Survey. The technical committee and plan review team examined that data and tried to understand it in the context of the traffic light approach.

What this graph is showing you is kind of the same types of analysis that we've been doing with the other indices where you essentially create an average for the time series that you have and then monitor that based on the green, yellow, red approach; green being increasingly good relative to that long-term mean; red being a decrease.

One of the confounding things that comes out of the NEAMAP Survey is that because it's for a short period of time, the average is kind of at an artificial level. As you see for 2012, there was a huge spike in the catch for that year; and in turn it raises that average up quite a bit. If you take out the 2012 year, it also then changes that average significantly.

That short time period is what was most concerning in terms of trying to account for it in relation to the other indices that were looked at where the reference period dated back to the 1990's. What the technical committee could be done at least on a preliminary level was trying to incorporate it from 2007 onward.

Trying to go backwards is a little bit more difficult because you're not collecting data in the same areas going back in history; but moving forward you can kind of look at it. The important thing to note here is that we tried to look at what the traffic light approach for croaker would be with NEAMAP included and with NEAMAP not included.

The first shows what the traffic light composite looks like with the NEAMAP data included. The second slide shows it removed. What it actually shows is that for this time period the NEAMAP data would indicate that there would be a decreasing trend in abundance. The technical committee is still working to try to calibrate and make sense of how we could try to go back in time a little bit more and further incorporate these two surveys through calibrations; but for the time being the short time period that NEAMAP has been in effect confounds the ability of really assessing it in the way we're able to with these other surveys.

In terms of spot, the harvest characteristic for 2013 saw an increasing proportion of green while a significant decrease in the proportion of red. This would make total sense given that both the commercial and recreational harvest doubled what they were the previous year. They remain below the 30 percent threshold for that two-year period; so they would not be tripping, dissimilar to what would be happening with croaker if one population characteristic was utilized for management action.

In terms of the adult abundance with the surveys that we used, which again was the NMFS Groundfish Trawl Survey and SEAMAP, what we see is an increasing trend in abundance for the years of 2010 up to 2012 with a slight decrease in 2013. In spite of that, it's not

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significant enough of a decline for there to be an increase in the proportion of red.

Therefore, while it's moving away from those highs that it had been, it is still not belong the long-term mean average. Again, similar to croaker, we didn't incorporate the juvenile surveys for the addendum, but I wanted to show to the board just in the context of understanding local representation.

For the Maryland Seine Survey, the proportion of red has been increasing over the last three years in the bay for the section that the survey captures. While it helps give more context to Maryland, it doesn't quite mesh up with what we see across the coast, which is why we were more interested in applying the adult characteristic in trying to determine management options. If there are any question about that, I can answer them.

MR. ADAM NOWALSKY: Going back to the first slide out of these you showed with the traffic light approach for 2013 for croakers; I believe – and I may have misheard you – I believe that I heard you say that with the addendum that – because there was the one factor that would have triggered management action; but I believe the addendum contemplates an option for a singular population characteristic should cause action.

I know we had some discussion about this at the last meeting. I believe there is some verbiage in here that has been clarified that I thought improved my understanding of it, which I appreciate, but perhaps I just misheard you, but I just wanted to get clarification on that based on the discussion from the last meeting.

MR. ROOTES-MURDY: Off of your comments at the last meeting; we did move to change the language in the addendum so that under each of the Options 2 and 3 there is the sub-option of choosing to apply either one characteristic to essentially cause a management response if one of those two characteristics fell below the 30 percent threshold for that period of time or if you would have to require both of the population characteristics.

In that way the addendum offers an opportunity for either management to be triggered on this one characteristic or for both having to fall below the 30 percent threshold for the given time period. It is an option that either it could not it could, depending on the board's pleasure.

MR. NOWALSKY: Okay, so then to clarify that, the two-way options that use the word "should" and the two B options that use the word "would require"; are they actually equivalent to that end? Is should and would require the same? I'm looking at Page 7 to start with for the croaker. 2A says management action should be enacted, which to me means it may not be enacted. Again, I just want to get clarification on that.

MR. ROOTES-MURDY: Adam, I believe it's a typo that says the "would/should" discrepancy that you're referring to.

MR. NOWALSKY: So both options should read "management action would" – okay, great, thank you.

CHAIRMAN GEER: Thanks for catching that, Adam; that was a good find. Any other questions or comments for Kirby? Okay, we've been at this for three meetings now; and I think, Mr. Grist, you have the floor.

MR. GRIST: Mr. Chairman, I would like to offer a motion. **The motion is to adopt Option 3, the state-by-state management framework; and Sub-Option 3B, Multiple Population Characteristics Criteria for Draft Addendum I to the Omnibus Amendment for Spot and Draft Addendum II to Amendment 1 of the Atlantic Croaker FMP.**

CHAIRMAN GEER: Seconded by Mr. Woodward. Any discussion on this? All right, move to adopt Option 3, the state-by-state management framework; and Sub-Option 3B, Multiple Population Characteristics Criteria for Draft Addendum I to the Omnibus Amendment for Spot and Draft Addendum II to Amendment 1 of the Atlantic Croaker FMP. Motion by Mr. Grist; second by Mr. Woodward. All those in

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favor raise your right hand; all those opposed do the same. **Carried unanimously.**

**FISHERY MANAGEMENT PLAN  
REVIEWS AND STATE COMPLIANCE**

CHAIRMAN GEER: All right, moving on, Kirby is going to give us FMP Reviews and state compliance for both croaker and red drum.

MR. ROOTES-MURDY: Again, I'll go through these fairly quickly. For croaker, this is covering much of the ground that has been discussed in the triggers and traffic light. For Atlantic croaker, in terms of the status of the fishery, from New Jersey through the east coast of Florida, the 2013 estimated landings were at 13.9 million pounds.

This represents a 66 percent decline in the total harvest since peak of 41.2 million pounds in 2001. The commercial and recreational fisheries harvested approximately 71 percent and 29 percent of the total, respectively. In looking at looking at recreational harvest, the 2013 landings were estimated at 7.7 million fish and 3.9 million pounds, showing a slight increase from the 2012 numbers. Virginia was responsible for about 56 percent of the 2013 recreational landings in numbers of fish; followed by Maryland at 15 percent and New Jersey at 11.

In 2013 recreational anglers released 14 million fish, which is higher than the ten-year average at approximately 11.8 million fish. In looking at state compliance and *de minimis* status, the PRT finds that all states have fulfilled the requirements of Amendment 1. For *de minimis* the criteria is that for either fishery the three-year average must be less than 1 percent of the coast-wide total.

The states of Delaware, South Carolina, Georgia and Florida requested *de minimis* and all qualify for such. The status does not exempt those states from any of the compliance requirements. It is the board's pleasure to determine the status of these states and approve them *de minimis* status as well as the FMP review. Thank you.

CHAIRMAN GEER: Okay, any questions or comments? I need a motion. Adam.

MR. NOWALSKY: **Move to accept the compliance reports and approve the *de minimis* requests as presented.**

CHAIRMAN GEER: Seconded by Joe Grist. Okay, the motion is move to accept the compliance reports for Atlantic croaker and approve *de minimis* requests as presented. Motion by Adam and Joe. Any opposition to that? **Seeing none, consider it carried and approved.** Now we have to do red drum.

MR. ROOTES-MURDY: I'll go through the Red Drum FMP Review now. The 2014 update, which is landings and information up through 2013, total red drum landings in 2013 as shown in the shaded area were approximately 3.1 million pounds; a 69.6 percent increase from 2012 and an 88 percent increase above the previous ten-year average.

The recreational harvest represents about 87 percent of the landings in 2013, which is down from 2012. In 2013 51 percent of the total landings came from the southern region where the fishery is exclusively recreational. The majority of the commercial landings came from North Carolina in 2013. Historically North Carolina and Florida were the major commercial harvesters and with Florida now as a game fish status.

In the recreational fishery, recreational harvest increased from approximately 500,000 fish, which is 1.7 million pounds in 2012, to approximately 760,000 fish in 2013, which is approximately 2.7 million pounds. The 2013 harvest represented a 50 increase in the numbers and a 58 percent increase in the pound from the ten-year average.

Recreational releases have shown an increasing trend over the time series. The proportion of releases decreased slightly in 2013, down from 91 percent to 81 percent; but the overall number of fish released decreased as well from 5.7 million pounds to 3.2 million pounds. It is estimated that 80 percent of released fish die as a result of being caught, resulting in an estimate of 263,000 fish resulting in dead discards in 2013.

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With regard to state compliance, there are no specific criteria defined. The states of New Jersey and Delaware requested *de minimis* status. The PRT compares essentially the state's two-year average to the total landings off the coastwide. For New Jersey that constituted less than zero percent of the coast-wide landings; and for Delaware it was 0.17 percent.

The status doesn't exempt these states from any of the compliance requirements; but essentially in spite of not having criteria, the PRT finds that these states would essentially be able to qualify for such. While it's not a compliance issue, North Carolina, due to an overage in their 2013 to 2014 commercial fishery, would have to take a reduction in the subsequent year.

As the 250,000 pound quota was exceeded by approximately 12,000 pounds, as such that would be deducted in the 2014/2015 commercial fishery season. The PRT finds that all the states have fulfilled the requirements of Amendment 2. The recommendations are the continued moratorium in the EEZ; consider the *de minimis* of New Jersey and Delaware and consider the prioritized research and monitoring recommendations as outlined in the compliance report. Jeff will be going through momentarily the terms of reference that will be building off of some of these research items that have been built into the compliance report for a while now. If you have any questions for me, please let me know.

DR. LOUIS B. DANIEL, III: It's not a question but an explanation. The red drum fishery in North Carolina opened September 1 and in fairly surprising fashion the quota was caught up in about two months at a ten-fish bycatch allowance. We are doing some investigations into those activities and hopefully we'll have something to report at the annual meeting in terms of things that occurred.

What it did was it basically shut the fishery down for the rest of the state except for the northeast. Then as a result of the concerns over the summer and the warm weather of the potential for this year class that we're seeing in

North Carolina and Virginia that's bigger than anything we've ever seen, the commercial industry actually came forward and asked for me to close the gill net fisheries in inside waters where drum occur.

The gill net fishery has been closed in North Carolina since I believe around May 15 and it will remain closed until September 1 in areas where red drum occur. That certainly was a huge reduction in discard mortality with those nets out of the water and the fishery closed. I've got a proclamation ready that I'm going to review with my commission in a couple of weeks.

I'm going to reopen the fishery September 1, but I'm going to lower the trip limit and require specific species to be caught with the bycatch to try to avoid any future overages. In the proclamation it reduces the 150,000 pound fall quota by the overage that Kirby reported. I think it was about 12 or 13,000 pounds. We've handled all that, and I think we're in good stead.

We took a lot of efforts to make sure we didn't have a lot of dead discarded red drum. We are starting to see more and more frequent large year classes of red drum moving through the fishery with the expansion of the spawning stock biomass or the presumed the expansion of the spawning stock biomass. I just wanted to prepare that; and then to save you some time I'll make a motion that we accept the *de minimis* requests from Delaware and New Jersey.

CHAIRMAN GEER: Louis, would you like to add approval of the compliance reports as well to that motion?

DR. DANIEL: **Sure; approve the compliance reports and the *de minimis* requests for Delaware and New Jersey.**

CHAIRMAN GEER: Robert Boyles seconds it. Marty, did you have something?

MR. MARTIN GARY: I just wanted to ask Kirby – I may have missed it, but was there a release mortality rate assigned to red drum in the recreational sector?

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MR. ROOTES-MURDY: I believe it's 8 percent.

CHAIRMAN GEER: Yes; that's what it was; it was 8 percent. Any other discussion? All right, I'll read the motion: **move to approve the compliance reports and accept *de minimis* requests for Delaware and New Jersey. Motion by Dr. Daniel; second by Mr. Boyles. Seeing no opposition; consider it approved.**

**APPROVAL OF 2015 RED DRUM STOCK  
ASSESSMENT  
TERMS OF REFERENCE**

All right, Item Number 7, the Red Drum Stock Assessment is in the process; it is just starting up. It is going to be done next year and we need to talk about the terms of reference and Jeff is going to give us that information.

MR. JEFF K. KIPP: I'll be going over the terms of reference for the 2015 Red Drum Benchmark Stock Assessment as well as the proposed timeline for that assessment. If you recall, there are two sets of terms of reference; one to guide the stock assessment and a second set to guide the peer review. This peer review will be coordinated by SEDAR.

These were developed by the Red Drum Technical Committee and stock assessment subcommittee. First I'll go over the terms of reference for the stock assessment: If possible, identify and prepare new data that could be used to inform the assessment of adult and/or spawning stock trends.

Characterize precision and accuracy of fishery-dependent and fishery-independent data considered for the assessment, including the following but not limited to: provide descriptions of each data source; describe calculation and potential standardization of abundance indices; discuss trends and associated estimates of uncertainty; justify inclusion or elimination of available data sources; discuss the effects of data strengths and weaknesses on model inputs and outputs.

Define and justify definition of stock structure; review recreational fishing estimates and PSEs; compare historical and current data collection and estimation procedures and describe data caveats that may affect the assessment; estimate discards and size composition of discards in recreational and commercial fisheries where possible; evaluate the effects of stock enhancement program contributions on data inputs.

Develop models used to estimate population parameters and biological reference points, and analyze model performance; describe stability of model; assess estimated selectivity and discuss effects on population parameters; justify choice of CVs, effective sample sizes, and/or likelihood weighting schemes; perform sensitivity analyses for starting parameter values, priors, et cetera, and conduct other model diagnostics as necessary.

Clearly and thoroughly explain model strengths and limitations; briefly describe history of model usage, its theory and framework, and document associated peer-reviewed literature. If using a new model, test using simulated data; if model structure differs from the model structure used in the previous assessment, perform a continuity run of the previous model and compare estimates; discuss potential causes of any observed discrepancies; if multiple models were considered, justify the choice of preferred model and the explanation of any differences in results among models.

State assumptions made for all models and explain the likely effects of assumption violations on synthesis of input data and model outputs. Example of assumptions may include choice of stock-recruit functions; choice to use constant or time-varying natural mortality or catchability; choice of a plus group; constant ecosystem conditions.

Characterize uncertainty of model estimates and biological or empirical reference points; perform retrospective analyses, assess magnitude and direction of retrospective patterns detected and discuss implications of any observed retrospective patterns for uncertainty in

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population parameters, reference points and/or management measures. Recommend stock status as related to reference points; for example, is the spawning potential ratio above or below the 30 percent spawning potential ratio threshold?

Other potential scientific issues: if possible, assess any temporal changes in distribution of stock structure; discuss potential causes of any changes; compare reference points derived in this assessment with what is known about the general life history of the exploited stock; explain any inconsistencies.

If a minority report has been filed, explain majority reasoning against adopting approach suggested in that report. The minority report should explain reasoning against adopting approach suggested by the majority.

Develop detailed short- and long-term prioritized list of recommendations for future research, data collection and assessment methodology; highlight improvements to be made by next benchmark review; and recommend timing of next benchmark assessment and intermediate updates if necessary relative to the biology and current management of red drum.

All right, now I'll just quickly go through the terms of reference for the peer review. These are very similar to what I just went through; only they're for the peer review to evaluate essentially what we were guided to do in the stock assessment:

Evaluate the thoroughness of data collection and the presentation and treatment of fishery-dependent and fishery-independent data in the assessment, including the following but not limited to presentation of data source variance, justification for inclusion or elimination of available data sources, consideration of data strengths and weaknesses, calculation and/or standardization of abundance indices. And estimation of discards and size composition of discards.

Evaluate the definition of stock structure used in the assessment; evaluate the methods and models used to estimate population parameters and biological reference points, including but not limited to evaluate the choice and justification of preferred models; if multiple models were considered, evaluate the analysts' explanation of any differences in results; evaluate model parameterization and specification.

Evaluate the diagnostic analyses performed, including but not limited to sensitivity analyses to determine model stability and potential consequences of major model assumptions and retrospective analyses. Evaluate the methods used to characterize uncertainty in estimated parameters; ensure that the implications of uncertainty and technical conclusions are clearly stated.

If a minority report has been filed, review minority opinion and any associated analyses. If possible, make a recommendation on current or future use of alternative assessment approach presented in the minority report. Recommend best estimates of stock biomass, abundance and exploitation from the assessment for use in management, if possible, or specify alternative estimation methods.

Evaluate the choice of reference points and the methods used to estimate them; recommend stock status determination from the assessment or, if appropriate, specify alternative methods or measures. Review the research, data collection and assessment methodology recommendations provided by the technical committee and make any additional recommendations warranted. Clearly prioritize the activities needed to inform and maintain the current assessment and provide recommendations to improve the reliability of future assessments.

Recommend timing of the next benchmark assessment and updates, if necessary, relative to the life history and current management of red drum. Prepare a peer review panel terms of reference and advisory report summarizing the panel's evaluation of the stock assessment and addressing each peer review term of reference.

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Develop a list of tasks to be completed following the workshop; complete and submit the report within four weeks of workshop conclusion. Now I'll just go over the stock assessment timeline that was proposed for the assessment. A few of these items have already occurred. We had a planning call on May 7 to discuss data submission, data formatting and data procedures.

We had a call on June 12 to lay the groundwork for planning the stock assessment. We agreed to a data submission deadline this past Friday, August 1; and we have set the data workshop which will be attended by the technical committee and the stock assessment subcommittee for October 14 through 17.

Following the data workshop, we plan on an assessment workshop sometime in January or February of 2015. The assessment report deadline, to have that ready for the peer reviewers, is set at August 1, for that SEDAR Workshop which is on a schedule for August 25 through 27. Following that workshop, assessment reports, including the peer review report, will be finalized for a target date of October 1. That's all I have. If there are any questions, I'll be glad to answer them.

DR. DANIEL: I'm wondering and maybe get some board discussion this issue. I'm not exactly sure how to handle it, but I do feel like I need to bring it up. What kind of dawned on me during the presentation was the plus group talk. At least in the northern region we're seeing incredible abundance of red drum during certain years; and it has been consistently going up.

There are a lot of people that are starting to squirm a little bit in terms of the discards that we're seeing and the need or the want to be able to harvest more fish. Clearly, we don't want to do that until we have some assurances from the technical committee that we're at a recovered state or however we're going to characterize the fishery.

Right now I don't know that we really have an idea on what would be a recovered red drum

fishery. I don't know if we expect 60-year classes to be in the fishery before we declare it recovered. If we do, we just need to let the public know that. I think we've got about 15-year classes, maybe 16 that have been protected at around the 30 to 40 percent escapement rate.

That's pretty extraordinary, and I just would kind of like to get some sense from the technical committee as they do the assessment – you know, if we come back again with a 40-plus percent escapement rate in the northern region, would it be possible to declare them recovered and start to manage them as a recovered stock as opposed to continuing to list them as overfished and maintaining these restrictive measures that are resulting in fishery closures.

It is the age-old problem that we've always had is how to manage a recovered stock; but I also don't want to jump the gun and it's recovered. There are a lot of people looking at that and that will be a big issue that arises during the stock assessment; and maybe if we have some feedback from the peer reviewers and the technical committee, that would be helpful.

MR. KIPP: I think that will certainly depend on the stock assessment subcommittee's ability to reliably estimate biomass, which you recall back to the previous estimate was a huge difficulty there. That in turn will rely on whether or not some certain data limitations for the adult portion of the stock have been addressed adequately since the past assessment, which we're hopeful it has been. Our ability to I think determine whether a stock is rebuilt or recovered will rely on some reliable biomass estimates.

DR. DANIEL: Again, I don't want to get into the debate right now, but that's not the way we started with red drum. When I first started working on red drum, I think they were at 0.3 percent SPR or escapement; and now they're constantly over 40. The concept in the original plan and in Amendment 1 and I think 2 was that the escapement was a proxy for SPR, which is a biomass estimate.

I don't know that it's – I don't think that is no longer true. Yes, we'd love to have the biomass

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estimates, but I don't think the board has ever expected that we would delay and positive rebuilding recovery projections if we didn't have a biomass estimate. We may still not have one; but yet if we're still getting the 40 percent consistently over time, then the assumption by the technical committees of the past was we'd ultimately get to a 40 percent SPR.

The big question is, is 15 years enough; do we need 20; do we need 30? What is the generation time; is two generation times sufficient on a very long-lived fish. Certainly, we've declared striped bass recovered and had some oopsy moments; so I don't want to do anything like that; but at least know that there is going to be a lot of calls if we're above 40 percent again to try to do something and avoid these closures on a stock that's recovering so nicely at least in the northern region.

I can't really speak to the southern region, but I know in the northern region we've had some real issues with them this years. I understand what you're saying and I just bring it up as a point as sort of a heads-up that if we can get some technical advice on this, it would be good. If it comes back exactly what you just said, then that's the advice.

But I would hope that we would have some of our state folks be a little more forethoughtful about how we may answer those public questions because that's going to be the big question that comes out of this assessment. If we come back and say status quo on management actions and we're at 40 percent again, Virginia and North Carolina – I'm assuming Virginia and certainly North Carolina are going to have some problems.

DR. WILSON LANEY: I just wanted to ask I guess North Carolina, South Carolina and Georgia; I know we designed that bottom longline survey to try and get at some sort of an offshore index of adult abundance. I guess I haven't heard an update lately; so did we generate the information with that survey that's going to help the technical committee gain some insight into that question?

MR. SPUD WOODWARD: I can tell you from the Georgia perspective the answer is no. There have been vast amounts of effort exerted and we're producing great information on sharks. I think there is going to be very little to come out of that survey that is going to have any positive effect on this next assessment. It just continues to be the Holy Grail of red drum management that we can't seem to find.

CHAIRMAN GEER: But in contrast North Carolina is being very successful with that survey for red drum and South Carolina is between those two scenarios. Wilson.

DR. LANEY: I've read a little bit in the popular press about Chris Taylor's work with NOS in doing some of the survey work for the Bureau of Ocean Energy Management in those wind call areas off North Carolina, using some electronic approaches to monitoring fish biomass; and I was just wondering if anybody knows whether or not that's sophisticated enough at this point to be able to use something like that to monitor red drum biomass.

I guess it would depend on whether or not you got a distinctive enough signature to be able to tell that you were looking at red drum and not some other species. I don't know whether that's the case or not, but it's something that we might want to ask our NOS colleagues to address in a future meeting maybe. Louis may know more about that.

DR. DANIEL: That would be difficult to do because I think a lot of times the signatures are dependent on the swim bladders. I can tell you in North Carolina, Pat is right, we've been pretty successful in catching them. The other thing that we're seeing – and I don't know if you are seeing it down in the southern areas, but we're starting to see these big schools of red drum; acres of them that are all the big adult; 30-plus-pound fish, up and down the beach.

They're even occurring in areas where we've never heard of those fish occurring; but especially between the Capes, we're seeing huge numbers of really big red drum; nothing like we have ever seen before anywhere else. Every

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now and then you'd see one that would make the newspaper. Now it's a pretty common event and they're different schools. You can see them from the air and it's easy to find them.

MR. ROBERT H. BOYLES, JR.: Speaking from the southern perspective, I'll start out by saying based on a lot of effort on our staff's part we know a lot more about red drum now than we did even five years ago. Recruitment bottlenecks, barriers to recruitment, more about life history; and I'm very proud of that, but I will say we've seen a number of poor year classes in the southern portion. The reason for the bifurcation, I don't know.

I could certainly speculate, but I think that's something we're going to have to come to grips with. I think I've mentioned this in an earlier e-mail to staff; and it's probably something for us to discuss here, following on Dr. Daniel's comments; that I think we need to come to grips with the question of what does success look like in recruitment?

We have had some success at looking at those adults in the offshore spawning population. We see some signatures in the data that suggests that they're seeing escapement into the breeding population; and that to us has always been a very, very good sign. But with a species like this in the southern region is 34 years old, I believe, 35-year-old fish; it takes a long time to correct for the sins of the past. I think we need to really come to grips; because Louis is right, our constituents on good years are asking, hey, what can we do? On poor years like this year, the question is what do we need to do? I think we owe it to our constituents that we provide some kind of predictability and stability in the management process. I don't know what that looks like, but certainly I would value the wisdom of the group. Thanks.

MR. GRIST: I was just going to follow up on what Dr. Daniel said. We're seeing a similar trend in our waters between Cape Henry and Cape Charles both from spotter planes and from the recreational anglers about just huge masses of adult bull reds out there. Once you find them, they can fill up on a citation, and it's the easiest

thing in the world to go out and get a trophy-sized fish quickly out there these days, this time of year. It is just mats of them everywhere. They seem to be on balance between the two capes there as well; just as what Louis is seeing down toward Carolina. It's not just Carolina; we're seeing it in the lower part of Virginia as well.

MR. WOODWARD: Maybe to help focus some of the future efforts of the technical folks; I'd like to see a fresh look at – you know, we have established a biological reference point to rebuild something, a long-lived species. Is that same reference point appropriate for sustaining a long-lived species? To me, I'd like to see that kind of fresh look at it.

Louis and I have been doing this a long time; and it would be nice to have a look at it. When we all started adopting these 40 percent SPRs, there was a lot of question then; is it the most appropriate thing for all species?

I think that we would all benefit from a fresh take on that; because if we're going to have a different reference point for a sustained, viable, whatever we're going to end up calling them, it would be nice to know that because that's going to play into our discussions on how do we deal with using the benefits of a rebuilt stock.

CHAIRMAN GEER: Any other comments? Do we want to include these comments in the terms of reference or do we just want to note them? Robert.

MR. BOYLES: Mr. Chairman, I was going to ask staff for some guidance because I think these are critical elements; but I sense we're at an inflection point. Some of these things – you know, I think the sense of the question I asked what does success look like; I think that's a policy question. I could certainly use the benefit and the wisdom of the technical committee, but I don't think that that is a term of reference necessarily; but I think that's certainly something for us to come to grips with. I would look to staff, Toni, maybe, on how we move the needle on this discussion.

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MS. TONI KERNS: I was just conferring with Pat; and I think what we can do is try to do some runs that vary around some different SPR rates that would help give you all some guidance on how to make that policy decision on how you want to define success and go from there. Does that work?

I think that works within the realm of the terms of reference that we have identified here; and then we have these comments that we can bring back to the SAS as they work on the assessment and the technical committee as well.

CHAIRMAN GEER: Is everybody okay with that? All right, we need to approve these terms of reference. Mr. Woodward.

MR. WOODWARD: **I'll make the motion that we approve the terms of reference for the red drum stock assessment as presented.**

CHAIRMAN GEER: Second by Joe Grist. Anymore comments on this? Any opposition? **All right, we will consider this approved, the terms of reference for the stock assessment.**

**ADJOURNMENT**

CHAIRMAN GEER: Okay, any other business? Hearing none; the meeting is adjourned.

(Whereupon, the meeting was adjourned at 2:10 o'clock p.m., August 7, 2014.)

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