

**PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
WEAKFISH MANAGEMENT BOARD**

**February 9, 2005  
Radisson Hotel Old Town  
Arlington, Virginia**

## **ATTENDANCE**

### **Board Members**

David Pierce, Massachusetts DMF  
Bill Alder, Massachusetts Gov. Apte.  
Mark Gibson, Rhode Island DEM.  
Eric Smith, Connecticut DMR  
Fred Frillici, proxy for Sen. Gunther (CT)  
Lance Stewart, Connecticut Gov. Apte.  
Gordon Colvin, New York DEC  
Pat Augustine, New York Gov. Apte.  
Brian Culhane, proxy for Senator Johnson (NY)  
Bruce Freeman, New Jersey DFG&W  
Ed Goldman, proxy for Asbmn. Smith (NJ)  
Tom Fote, New Jersey Gov. Apte.  
Roy Miller, Delaware DFW  
Bernard Pankowski, proxy for Sen. Venables (DE)

Pete Jensen, Maryland DNR  
Bruno Vasta, Maryland Gov. Apte.  
A.C. Carpenter, PRFC  
Jack Travelstead, Virginia MRC  
Kelly Place, proxy for Sen. Chichester (VA)  
Ernest Bowden, proxy for Catherine Davenport (VA)  
Louis Daniel, Chair, North Carolina DMF  
Damon Tatem, North Carolina Gov. Apte.  
John Frampton, South Carolina DNR  
Robert Boyles, South Carolina DNR  
Spud Woodward, Georgia DNR  
John Duren, North Carolina Gov. Apte.  
Anne Lange, NMFS  
Jaime Geiger, USFW

### **Ex-Officio Members**

Jim Uphoff, Maryland DMF, Technical Committee Chair  
Desmond Kahn, Delaware DFW, Stock Assessment Subcommittee Chair

### **ASMFC Staff**

Brad Spear  
Julie Nygard

Toni Kerns  
Vince O'Shea

### **Guests**

Margaret McBride, NOAA  
Howard King, MD DNR  
Byron Young, NY DEC  
Bill Cole, USFWS  
Steve Myers, NOAA Fisheries  
John Merriner, NMFS SEFSC  
Pete Eldridge, NMFS SERO  
Dan Dugan, Delaware AP Rep  
Diane Baynard, CCA

Jim Price, CBEF  
Jeff Livingston, MD DNR  
Joe Lynch, NC DMF  
Mike Litchko, DE waterman  
Charlie Givens, NJ waterman  
L. Callahan, Atl States Fish Journal  
M. Hendricks, PA FBC  
M. Kaufman, PA FBC  
Chris Hager, VIMS

*There may have been others in attendance who did not sign the attendance sheet.*

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## INDEX OF MOTIONS

1. **Move to recommend to the ISFMP Policy Board that NY, NJ and MD be found out of compliance with the provisions of Amendment IV to the Weakfish Management Plan for not collecting sufficient biological samples. In order to come back into compliance, they must sample the appropriate level in 2005.** Motion made by Dr. Pierce, second by Mr. Miller. Motion postponed indefinitely. (Page 13)
2. **Move to postpone indefinitely.** Motion made by Mr. Jensen, second by Mr. Augustine. Motion carries. (Page 13)
3. **Move to initiate an Addendum to revise the biological sampling requirements of Amendment IV to the Weakfish Management Plan based on the recommendations of the Technical Committee.** Motion made by Mr. Augustine, second by Mr. Miller. Motion carries. (Page 18)
4. **Move to accept the 2004 Weakfish FMP Review.** Motion made by Mr. Freeman, second by Mr. Carpenter. Motion carries. (Page 20)
5. **Move to accept William Mandulak to the Weakfish Advisory Panel.** Motion made by Mr. Adler, second by Mr. Augustine. Motion carries. (Page 43)

**ATLANTIC STATES MARINE FISHERIES  
COMMISSION**

**WEAKFISH MANAGEMENT BOARD**

**Radisson Hotel, Old Town  
Alexandria, Virginia**

**February 9, 2005**

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The meeting of the Weakfish Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Suite of the Radisson Hotel Old Town, Alexandria, Virginia, on Wednesday, February 9, 2005, and was called to order at 2:00 o'clock p.m. by Chairman Louis Daniel.

**BOARD CONSENT**

CHAIRMAN LOUIS DANIEL: Good afternoon. I'd like to call this meeting of the Weakfish Management Board to order. In your briefing materials you should have an agenda. If everyone has had an opportunity to look that over; and if so, with no objection, we'll approve the agenda.

Next, you also got your minutes associated with our May 25, 2004, meeting. Are there any corrections or discussion on the minutes? If not, without objection, the minutes are approved. That takes us down to the next agenda item, which is public comment.

No one has indicated to me a desire to speak. Is there anyone in the audience that would like to address the management board? Seeing none, we'll move into our first item of business, which I'll turn over to Brad to go over the plan review team report regarding state compliance and FMP review.

**PRT REPORTS**

MR. BRADDOCK J. SPEAR: Thank you, Mr. Chairman. State compliance reports were reviewed for the 2003 fishing season. This turned out to be the first review under Amendment 4 and it's requirements. New York did not submit a report for the 2003 season until today. Gordon may have comments on that.

MR. SPEAR: For the commercial landings, all state landings dropped between 2002 and 2003,

and right now you're receiving the FMP review and the plan review team reports. And if you'll look at Table 2, it's a summary of commercial landings by state from 1982 to 2003.

And, again, for the past five years, since 1998, commercial total landings coastwide have dropped since 1998. And if you look at Table 1 of the FMP review, it has a ratio or a percentage of commercial landings to recreational landings.

And since the year 2000 there has been a higher percentage of the total catch has been commercial landings, but it's below the time series average of 73 percent. I believe for 2003 70 percent of the landings were commercial.

And for the recreational landings, most state landings dropped from 2002 to 2003, and you can see that reflected in Table 3 of the FMP review.

Both Georgia and Massachusetts had small increases in recreational landings, and North Carolina had a fairly significant increase in recreational landings by doubling their landings from 2002 to 2003. But, still, the total coast-wide rec landings were the lowest in the time series. It's the first time in the time series that it has dipped below a million pounds.

Connecticut, South Carolina, Georgia, and Florida requested de minimis status for 2004, and the PRT determined that they did meet that requirement for de minimis. Massachusetts also qualified for de minimis but did not request it. They were exposed to the full requirements of Amendment 4 for 2004.

One of the new requirements in Amendment 4 was a biological sampling requirement. If you recall, there was a tiered system that states landing at least 150,000 total pounds of weakfish per year were required to sample a certain amount of otoliths and lengths of weakfish.

If you look at Table 1 in the plan review team report, you'll see that I have put together a table of the samples that were collected in 2003 and what states were required to sample in 2003, and these are all based on the NMFS landings and the MRFS Website.

MR. A.C. CARPENTER: Table 1 is on Page 11 or Table 1 on Page 4? We've got two Table 1s in here and I'm getting confused real easily. Can you help me out?

MR. SPEAR: Sure. It's Table 1 on Page 4 of the plan review team report. In the packet that was

handed out, the first report is the plan review team report, and the second one is the FMP review, the longer one. So, the biological sampling table is Table 1 on Page 4.

So in 2003 New York, New Jersey, Delaware, Maryland, Virginia and North Carolina were required to sample. The way those calculations were made I put in the Appendix A. It is my interpretation of Amendment 4's sampling requirements, and it goes through which years were used to determine the level of sampling that states were required to conduct.

And continuing to look at Table 1 on Page 4, Delaware, Virginia and North Carolina fulfilled their sampling requirements and New York, New Jersey and Maryland did not fulfill their sampling. Because I received New York's report late, it's not included in this report but they sampled 35 fish in 2003.

And just to note, Rhode Island and Georgia took otoliths and lengths of weakfish even though they were not required to. Rhode Island collected a fairly significant amount of biological data and Georgia sampled three weakfish for us which --

CHAIRMAN DANIEL: We appreciate it.

MR. SPEAR: Yes, we appreciate it, we'll take it. A couple of the PRT recommendations, we recommended that states strictly adhere to the sampling requirements of Amendment 4 and that the board ensure that these requirements are conducted.

Also, the PRT recommends that because the drop in landings and weakfish, the requirement in Amendment 4 for states that land at least 150,000 total pounds are then required to sample may become -- will change and because landings have dropped some states will then drop out of that requirement to sample.

And the PRT felt that it was even more important now that the landings are dropping that we got this information. So the plan review team is suggesting that the board consider changing the system to determine the level of sampling states are required to conduct.

And we suggest that in referencing Amendment 4, the 150,000 pound lower level for sampling was calculated based on 2.5 percent of the total coast-wide landings at the time. So using that as a starting point, we felt that some sort of calculations similar to calculating de minimis where over the past two-year period of landing, states that land at least 2.5 percent

of the total coast-wide landings would then be required to sample.

And, also, other PRT recommendations, because some states did not fulfill their sampling requirements of Amendment 4, we recommend that New York, New Jersey and Maryland be found out of compliance and that all other jurisdictions be found in compliance. That concludes the report.

CHAIRMAN DANIEL: Thank you, Brad. Certainly, in the upcoming discussion on the plan review, the collection of catch and effort information, length data, age data is a critical component of our success.

And as we'll hear shortly from our technical committee, one of our big problems is the adequacy of the data that we have to conduct these stock assessment. And so everyone's cooperation and compliance with the sampling programs and needs that we have are important.

But we recognize -- I think we should recognize that with the lower catch rates, it does make getting these samples more difficult. I don't know that we're going to get a long way arguing about why folks didn't get their plans in, in time or why they didn't get the samples that they needed. I think what we need to do now is look forward and figure out how we can fix this, how we can monitor this a little bit closely, or more closely, and make sure that we get those information rather than wasting our time about reports that were not completed in 2003. But I open that up to the board for their discussion and debate, and I'll start over here with Mr. Fote.

MR. THOMAS FOTE: It was brought to my attention and Assemblyman Smith's attention the other day that we weren't in compliance because of these facts. We had a long discussion with some of the recreational groups in New Jersey to basically look at a way of getting these samples without the cost, because that's what really happens here is the cost or getting the, you know, the division out when the fish are out there, at least if we can do it by recreational, so we're going to do a workshop.

We're going to basically look at not only doing weakfish but tautog and everything else that needs to be done, collecting all those. So the two groups were willing to put up some money so hopefully that will help correct this problem in the following year because we realize the importance of it.

CHAIRMAN DANIEL: Thank you, Tom. Roy.

MR. ROY MILLER: Thank you, Mr. Chairman. I'm not so much interested in any punitive measures because as a state representative, I certainly understand budgeting priorities, manpower priorities and the like and how that can lead to not being able to comply with monitoring requirements.

Also, it was difficult for my state this year to get the required number of samples because our fishery was so depressed. It was much more of a challenge this year and maybe some other states had the same problem because of what we'll hear about later this afternoon.

I'm wondering if -- Tom already made a suggestion of what they can do to rectify this problem. I'm wondering what New York and -- who was the other state?

MR. SPEAR: Maryland.

MR. MILLER: Maryland can offer so we can avoid this particular problem in the future. Thank you.

CHAIRMAN DANIEL: I had Des.

MR. DESMOND KAHN: Thank you, Mr. Chairman. I wanted to comment that there is some language in the plan that I regard as unfortunate. It says that states should be sampling from both their recreational and commercial landings.

We have length-frequency samples collected by MRFSS for our recreational fishery. We don't really need additional recreational length-frequency data. I don't know why that is in there.

What we need are additional length-frequency distributions from the commercial landings. That is where we have the gaps in certain regions. We have significant gaps from areas that land major amounts commercially.

We have no data on those landings. I would suggest that language be changed. I don't know why it was put in there. It's redundant with MRFSS. We need to focus on the commercial.

Now, for example, if say New Jersey recreational anglers could supply otoliths with lengths so we could get additional age-length data, that would be valuable. But to characterize the catch at age from the commercial fisheries, we need length frequencies which we don't have in some states. Thank you.

CHAIRMAN DANIEL: Thank you, Des. Bruce.

MR. BRUCE FREEMAN: I was just going to mention that the samples New Jersey got in 2003 and in fact 2004, which are about the same, come primarily from one individual who is doing all the cooperating. He happens to be a recreational fisherman.

And as Tom indicates, because of our limited manpower and budget, we brought this issue to the attention of the board when the amendment was passed that we didn't have the wherewithal to collect the biological samples.

Now, we well recognize the need for these. But, if we make this a priority, we're going to be delinquent in bringing forth information on another species, be it striped bass or summer flounder or something else.

There needs to be, in my opinion, some recommendation from the technical committee. As I indicated, we're getting our samples from the recreational harvest and you also see fishery-independent. Any weakfish we catch in our ocean trawl fishery are included here as well.

That's where the lengths are coming from. But for us to sample the commercial catch takes us over several hours in travel plus we have to purchase the fish plus the person's time.

It's just not possible unless we change priorities, so I think we need to perhaps review all the plans and figure out what information is the most critical; and then if something has to give, then the thing at the bottom gives and we provide information on these other species.

But it's a problem that we've faced. We've notified the board of that and we continue to face it. Every time we do a plan we require more information, and it's just -- in our instance we've gotten to the point there are just no other people to do things, and it may get worse.

CHAIRMAN DANIEL: Thank you, Bruce. I have Jim and then Dave and Gordon.

MR. JIM UPHOFF: Just to explain a little bit of what happened with Maryland, in 2001, which the sampling requirement was based on, we had a real boom in our weakfish fishing; 2001 we landed 720,000 pounds of weakfish.

By the time we were sampling in 2003, our fishery landed 56,000 pounds of weakfish. The sampling requirements essentially were I think quite disproportionate to the fishery we had by that time.

I think that's something that may have to -- it's not in the Amendment 4 document, but there may have to be some consideration for how rapidly the situation has deteriorated. And in fact Amendment 4 was originally designed for a stock that was near restoration or going to be restored and at a high level of abundance with fairly large fisheries.

Essentially the coastal fisheries have gone into freefall and those sampling requirements may not -- they're out of phase with the fishery. That's my opinion for my part.

CHAIRMAN DANIEL: Certainly, one thing that might help would be to maybe ask our National Marine Fisheries Service partners to perhaps help us out and collect some of the fish off the inshore fall survey.

That would offset some of these needs that we have, and that's a well-known program that collects good distribution of sizes, and to be able to collect some of those ages may take some of the onus off the states. Dr. Pierce.

DR. DAVID PIERCE: This problem that the states are having in getting the data, it just typifies I think the extent to which our individual states are short-changed with our budgets, not just for research but also for management.

It has been a concern to me, of course, for a long time in Massachusetts. Other states have the same problem. Important fisheries within our states, high-profile industries that demand good management and good research, and it doesn't happen, the budgets don't reflect that.

So we have to continuously turn to the National Marine Fisheries Service to bail us out. Thank God for the National Marine Fisheries Service because the states don't provide the funds necessary for good management and good research generally. And this is crippling.

And, clearly, it's crippling as evidenced from the fact that we have a stock assessment that we'll discuss shortly that indicates the current assessment and model results present two very different scenarios to the managers; the stock is in wonderful condition and

the stock is in trouble.

And a lot of this conclusion, it seems to me, from my review of this report comes about because of our not being able to provide, as states, basic data, basic data relative to what the nature of the catch composition is, age and lengthwise, commercial fishery specifically in this particular case.

So, I'm very sympathetic to those states that have not been able to do the sampling because I'm in a similar boat oftentimes with other species. Nevertheless, the message needs to be sent to the individual states and to those who provide the budgets, that we as managers, the board, is in a very difficult position when we get advice that is polls apart, wonderful condition versus stock is in trouble, and we can't make the distinction between those characterizations because we don't have the basic data necessary to characterize the fishery.

So, I understand, it's difficult to rule a state or states out of compliance because they're not getting the information necessary or they're not able to put in the necessary effort for sampling.

I understand that, but, still, as individual states we have to do everything necessary to get that sampling or to impress upon those who provide us with our budgets that don't expect good management or effective management of these critical resources when we don't get the support we need.

CHAIRMAN DANIEL: Thank you, David. Gordon.

MR. GORDON C. COLVIN: Thank you, Mr. Chairman. I have several points I want to make. First of all, kind of at the outset, the board may wish to take up the recommendation that the plan review team has made with respect to non-compliance.

And that will be the board's decision to make at the appropriate time. I would point out -- and I know this was discussed, and Bruce is quite right in reminding us that New Jersey fairly emphatically pointed this out at the time of the adoption of the current amendment that this isn't a typical non-compliance type of situation, because there is no way that one can go back and recover information, so the only thing a state can do to come into compliance is to make some kind of representation about what it intends to do hereafter.

I think it's probably appropriate and in order for the states -- and I'm certainly willing to do this -- to



provide some written representation to the board about our intentions for 2005 and beyond.

That said, let me just move into that area. I think Des Kahn's comments were helpful in terms of focusing us on the commercial fishery. Within the last year New York, National Marine Fisheries Service and Cornell Cooperative Extension of Suffolk County received another project approval, grant approval of ACCSP funds for our tri-type partnership in implementing a variety of ACCSP actions, including commercial sampling in New York.

And it will be our intention, based on this information, to sit down with the folks from Cooperative Extension and give priority in their market sampling to recovery of a weakfish sample from this year's fishery.

That said, I'll point out a couple of problems. One is that the plan also has this rather intimidating statement: "The sample should be representative of the state's commercial and recreational landings. The data should be stratified by area fish, calendar quarter, major gears, and market category."

I'm not going to represent to you that we're going to do that. I'm going to represent to you that we're going to make our best effort at grabbing however many fish we're supposed to grab and perhaps a little bit more than that if we can find them.

The other point I'll make is the same point I heard earlier from Jim and others. There aren't so many weakfish being landed any more. In fact, I'm not quite sure after we see the 2004 landings that we're not going to qualify for de minimis in New York. It's that bad. So we'll get what we can, but we can't get fish that aren't being caught and landed at all. It really is getting pretty grim.

The last point, on funding. Dave Pierce is right, it's difficult dealing with the state budget climate that we've been dealing with for some time. I was hoping for some more federal help than we got this year, and I want to raise a specific issue.

We just recently, all of us I think, got our annual love notes from Harry Mears with indication of our various apportionments under the IGA, the ACFCMA, and the anadromous grant so that we're going to go apply for.

We were unfortunately made aware through that process that New York's commercial landings had declined to the point -- this is largely a result I think of the lobster die-off, but the weakfish drop doesn't

help -- had fallen below the threshold for a minimum state, so that's a big cut in our IGA grant that used to support a full-time staff person and no longer can.

I did not and what I didn't see in my letter on the ACFCMA was any increase that might be a New York share of the \$2 million increase we learned about last November in the annual appropriation under that program. Nor do I see any indication that the disposition of that increase is going to be under discussion this week, so I thought I might just raise to Vince and Anne the question of whether or not there might be some help on the way for some of us, whether it would be directly applicable to weakfish or applicable to something else that would free some staff time up to work on weakfish.

You know, we got a little more money but, by golly, we've seen less. So I just want to put that issue out there, and if you want to defer it to the Policy Board, fine, but I think it ought to get discussed.

CHAIRMAN DANIEL: Just because this is my first meeting as the board chair and I'm already three minutes behind schedule, I'd like to defer it to the Policy Board if that suits the board. I think we all recognize the problems that presents, Gordon Mark.

MR. MARK GIBSON: Thank you, Louis. We have a plan review team recommendation to find three states out of compliance. Before I would offer a motion to that effect, I'd like to understand better the sense of the board, if that's a meaningful motion or not, given that Gordon has said that 2003 is gone by, you can't recover those fish and were there to be a non-compliance finding, a motion and a finding of that, how would they come back into compliance? Gordon touched on that a little bit, but I'd like to understand how a state would come back into compliance; otherwise, there's no point in going through that exercise.

CHAIRMAN DANIEL: Well, that's kind of how I opened the discussion. I mean, I really don't see how you can come back into compliance once you've missed a 2003 report. I think not really a formal admonition but just the discussion around the table has indicated the need that we need to collect this data.

And the states that were to be found out of compliance have all recognized the need to do better in the future and develop some type of a program to collect this information that they need. Jack.

MR. JACK TRAVELSTEAD: I agree with you, I don't think there is much we can do this year for this, but I'm just curious what if one of the same three states came back next year and had made no effort? Then what do you do? Then you're in a real problem. I mean, you've essentially said there's nothing we can do because you can't go back and resample the prior year, so it's a dilemma. Is this not really a compliance requirement or is it?

CHAIRMAN DANIEL: Well, it always has been, and some states get it in. The first one I saw was Pat.

MR. PATRICK AUGUSTINE: Thank you, Mr. Chairman. You're doing well, only three minutes is not bad. To address this concern, I think to do anything other than ask the states to write some statement of the status of what occurred to them in 2003 for the record, in addition to what action they're going to take in 2004 and in future years to meet the commitment that the amendment calls for, it would seem to me would be most appropriate whereby the states have actually gone on record, justified, clarified and stated what they plan on doing in the future, and I think that would put teeth into their letter of intent.

In regards to Mr. Travelstead's comment, it would seem to me that the states would then be on record formally. And, be they not able to do what they said they were going to do for 2005, I think then it's time to find them in deep trouble and go forward with a finding of out of compliance.

So, if a motion to that effect would be required or consensus from the board would be better, I would ask, Mr. Chairman, to ask the other board members accordingly. Thank you.

CHAIRMAN DANIEL: Good suggestion, I believe, Pat. Is there objection to handling these issues as Mr. Augustine has suggested. Jaime?

DR. JAIME GEIGER: Mr. Chairman, conceptually I do not have a real serious problem with that particular approach; however, I am concerned about the process by which we deem states in or out of compliance.

My sense would be that if states are currently out of compliance, realizing the thing, I think we should go ahead and put a motion on the table to put those states -- make a motion to put those states out of compliance.

I would suggest, then, to table that motion and then let the states proceed along the lines of providing whatever written documentation it is, and then this board would have another option to either remove that from the table or whatever based on upon those explanations. My concern is that we are toying with monkeying a very defined process and I don't think we should go there. Thank you.

CHAIRMAN DANIEL: Thank you, Jaime. I've got Eric and then A.C. and then Pete and then Tom.

MR. ERIC SMITH: Thank you. Somewhat different comments came fast when I was trying to draft a motion to see if it could help us along, so forgive me if I duplicate a little bit. I think frankly it's a matter for the board to decide whether they want to find a state out of compliance.

I think that's the way the whole charter works, so it's a debatable point. I personally don't think, given these kind of budget climates, that anyone should be found out of compliance for the inability to -- we can't make money.

Legislatures make money and it gets parsed out by agency heads, and all we can do is ask and hope. I've never been comfortable with a compliance criteria being the research or the monitoring that gets done by a state budget.

And having said all that, it might even be helpful if we voted instead to send a letter to the agency head or the Marine Fisheries director which, of course, is a self-fulfilling letter, so maybe the commissioner of DEP, for example, that says in 2003 you were out of compliance and we understand the state has budget problems and so forth; however, the importance of this monitoring to weakfish management is also very important.

Maybe the agency can use that somehow in a positive way, so you've made the statement that, yes, you didn't meet the tests you were supposed to meet, we understand. There is no penalty you can go back to, everybody has said that so I won't belabor it.

I'm trying to get something positive out of this and maybe that written communication could be that. And it would maybe solve a little bit of Jaime's concern that we just not take a total pass on the issue, but at least we make the identification that, as understanding as we are, this was supposed to happen and it didn't. Then next year maybe you decide to do something different.

CHAIRMAN DANIEL: Thank you, Eric.  
A.C.

MR. A.C. CARPENTER: I think what would help me decide what to do in this situation is if I knew whether any of the states right now can tell me whether they're going to be out of compliance in 2004. 2004 is over and done with. I just got a nod from across the room that we've got one that will, so that helps me to get my idea of where to go with this.

CHAIRMAN DANIEL: Pete.

MR. W. PETER JENSEN: A couple of problems. One, to follow on to what Jim said, our total catch in 2003 was 72,000 pounds, so at least we've fallen below the threshold, but in fact the number we had to collect was determined before that based on some 2002 landings which were substantially higher order of magnitude so, you know, that's one problem.

I would argue that technically we're not out of compliance because we actually are below the threshold of needing to do it of 150,000 pounds. Secondly, it makes it a little difficult if that same sampling regime or numbers are held constant based on 2002; then we're not going to be able to promise to you we'll be in compliance in subsequent years simply because we can't anticipate that our landings are going to increase.

CHAIRMAN DANIEL: Tom and then we're going to make a decision here.

MR. FOTE: Yes, we're probably out of compliance for 2004, the same sampling size. And it was less fish available so less fish were being caught. You know, you asked us to get some older fish so we can get the otoliths on that and I've got a few people that do that.

You know, Eric, I wish the letter would help. I think there was times that a letter to the commissioner would help to do things like this. The only thing I see on this type of letter is he'll withdraw funds from one other program and throw them over here and not give us any supplement, especially in this budget climate.

I think it's up to us to come to a creative method. I mean, this would be easy if this was a quota because we could do what the councils do, just put a set aside to basically do the research and make those landings part of the cost of operating and doing business.

I think we need to seriously look at how we can get this done with the cheapest possible, and that's why I asked to do a workshop in New Jersey to do that. I think that's what other states need to do. I mean, we will try to come in compliance.

I guess the numbers also have to be adjusted because our catch also has dropped dramatically in the Delaware Bay and even along the coast and even in Raritan Bay, so we will do everything. We will try hard to work on this.

But a letter to the commissioner ain't going to do us any good right now because he's not going to free up funds. There's no funds to free up. As a matter of fact, I think the division is looking at a 15 percent cut this year. And, you know, that's our good news.

CHAIRMAN DANIEL: All right, we've got the Eric proposal, the Pat proposal, and the Jaime proposal; one to find those folks out of compliance and send the letters; one to simply admonish them and ask them what they're going to do to restore it; and another is to send a letter to the folks. After Vince and Anne, I'd like to get a motion on the table.

EXECUTIVE DIRECTOR JOHN V. O'SHEA: No, I'll defer to that, Mr. Chairman.

CHAIRMAN DANIEL: Anne.

MS. ANNE LANGE: I just want to make sure that the board recognizes or realizes that if there is a non-compliance finding and the commission is required to send a letter to the secretary, it must include what it is that the state or states must do to come back into compliance.

And if this board recognizes that it is impossible for the state to come into compliance with what is in the amendment as written, then I think the board really needs to address that now up front.

Otherwise, when the commission sends its letter, if they already know the state can't come back into compliance under the current criteria, I'm not sure what it is the secretary would be expected to do.

CHAIRMAN DANIEL: Thank you for that perspective. Bruce.

MR. FREEMAN: The difficulty we face is that we could not collect the adequate samples in 2003. We collected fewer, some, but fewer in 2004. And now we're facing a reduced manpower and increased budget deficit.

So, you know, realistically this goes around in a circle. If we made the effort and did collect the samples, then once the Striped Bass Board meets -- and, Louis, you're not the chairman, luckily -- we're going to be facing the same issue because we have requirements of sampling.

The only thing on striped bass it's probably costing us \$300,000 to \$400,000 to do that required sampling. Something has got to give or we have to find a way of getting the samples. There needs to be a collective effort within the commission to collect the samples.

In our instance, if you look in 2005, what we're talking about right now, our catches are so low that we're going to be able to sample much less than we were required for the last two years because our catches are dropping.

But, the issue, as Pete Jensen indicated, gets to the point where you can't find the fish, but then whatever you do find, whatever is taken, it's critical we have that information. But it becomes more expensive and more difficult to get.

So we need a strategy so that we can get the adequate sampling so that Des Kahn and his people and the committee can do what's necessary to give us the answers we're asking for. It's like a circular argument. It goes around and around.

Unless we provide the biological samples, we can't get the information we need for management, so again we need to come up with a strategy on how to do it. If we need more samples than what we're advocating here for the biological work to get done, then we need to come up with a way to do it. But passing motions in my opinion is not going to get us anywhere.

CHAIRMAN DANIEL: I've got Vince and then Gordon.

EXECUTIVE DIRECTOR O'SHEA: Well, you might need a strategy but what I'm hearing around the table I think you need an incentive. And it seems to me that when you approve a management plan, that management plan is up to harvesting at a certain rate and incurring a certain risk level based on your ability to monitor the fishery and collect data.

And if that data isn't forthcoming and you can't get that data, then the implications seems to me is then you back off on how aggressively you're going to

fish on that stock. I think that's what we just heard for the last four hours this morning. Thank you.

CHAIRMAN DANIEL: Gordon.

MR. COLVIN: I'm not sure you'd get an argument about that from me, Vince, as a general principle and certainly not in this instance. We'll probably get into that again after we hear about the assessment.

You know, there are other subtleties in all of this. I suspect some of us are doing work. I know New Jersey is doing work and we're doing work that we don't have to do to comply with ASMFC management plans.

Jersey runs a trawl survey. We run a small mesh trawl survey to do juvenile work in Taconic Bay. I don't know that I can think of any one of our FMPs that compels us to do that anymore. So, in theory we could stop doing that and go collect weakfish and tautog and other samples that are supposedly compulsory.

But I don't think there is a member of this board or the policy board or the technical committee that would want us to do that, you know, to stop the development and the maintenance of a long-term time series of useful trawl survey data.

So, don't forget that's part of the picture as well. We have to make some judgments about what we do on a priority basis that don't get discussed here. I don't know if you want to open that up or not.

We continue to do the small mesh survey in Taconic Bay that we started years ago primarily to develop annual recruitment indices for winter flounder and weakfish. At one time it was a compliance requirement for weakfish and it no longer is for New York, but we continue to do it and we plan to continue to do it. I put that out there as well.

CHAIRMAN DANIEL: Well, again, to me that's been an ISFMP Policy Board decision for years. I mean, when we have to do eel samples or we have to do -- you know, all the plans tend to tack on a compliance requirement to collect information.

There is an onus on the states to collect that information or be chastised by member states that have collected that information. The folks sitting up here at the front of the table have all served as technical committee chairs or stock assessment committee chairs for the last ten years and we've

been asking for this data.

But, we need to come up with some way to get it or else the assessments that we get are not going to tell us the information that we want in order to make management decisions. So, we have to come up with some way.

I'm not sure we're going to resolve that here today. I mean, I think this could go on until late into the evening discussing compliance criteria for all the various plans that we deal with. What we need to deal with is the fact that our plan review team has recommended that we find three states out of compliance for not collecting the necessary samples.

And we've got various options that have been discussed around the table on how to handle that. And so I think to move us on and get us into the meat of our meeting, which is to discuss the assessment and what we may do in the future with this stock, I think we need to move forward with a motion to address this. David.

DR. DAVID PIERCE: Well, you've already said it, Mr. Chairman, the plan review team has made a recommendation. Clearly, the technical people expect the managers to provide the data necessary for them to do their jobs.

It's an embarrassment for us as a board to tell the technical committee we're not doing what we have to do to give you the information necessary to do assessments that we demand from you. That's a very awkward position and it's unfair to the technical committee.

And although I'm very understanding of the problems that the various states have regarding budgets and what have you, it is a compliance criteria, and so **I would make a motion, Mr. Chairman, that the states of New York, New Jersey, and Maryland be found out of compliance with Amendment 4 to the Weakfish Fishery Management Plan for failing to collect the required number of biological samples.**

CHAIRMAN DANIEL: Motion from Dr. Pierce.

MR. COLVIN: Point of order.

CHAIRMAN DANIEL: Point of order, Mr. Colvin.

MR. COLVIN: And let me direct my

question to the staff, I believe, would be appropriate. I believe it is a requirement of our charter that a non-compliance motion identify what specific action a state must take to come back into compliance, so I would ask that that be added to the motion or it be ruled out of order.

CHAIRMAN DANIEL: Thank you, Gordon. David.

**DR. PIERCE: Consistent with what Gordon just said, I would add to the motion, then, to be found in compliance, the states of New York, New Jersey and Maryland must collect the required number of biological samples for 2005, recognizing that 2004 is gone.**

We can't do anything about that. There needs to be a commitment up front that at least this year we'll get the necessary samples. Otherwise, we will have gone more years without the data necessary to do an assessment that is adequate for our needs.

CHAIRMAN DANIEL: Thank you for that clarification. I need a second to this motion. I've got a second from Roy Miller. Discussion on the motion. Pete.

**MR. JENSEN: I move to table.**

MR. AUGUSTINE: Second.

CHAIRMAN DANIEL: Motion to table; second by Pat Augustine. It's a non-debatable motion. Do we need a minute to caucus? Vince.

EXECUTIVE DIRECTOR O'SHEA: Yes, just to perhaps perfect the motion, it's going to be a recommendation to the Policy Board, right, so move to recommend that the Policy Board --

CHAIRMAN DANIEL: Yes, a friendly amendment to move to recommend to the Policy Board.

EXECUTIVE DIRECTOR O'SHEA: Well, it wouldn't really be a friendly amendment. I'm not going to make an amendment.

CHAIRMAN DANIEL: All right, there is a motion to table. I don't think that's a debatable motion. Vince.

EXECUTIVE DIRECTOR O'SHEA: You really have, I guess -- wait a second, I'm going to talk to the chair.

CHAIRMAN DANIEL: Motion to table came from Pete. Can you give me an idea on the timing of this. I mean, are you talking about tabling it for the rest of the day, indefinitely?

MR. JENSEN: No, time indefinite.

CHAIRMAN DANIEL: Then that is a debatable motion and we'll take comment on it, and the term would be postponed indefinitely. So is there discussion on the motion?

MR. FRED FRILLICI: Fred Frillici. You can't table indefinitely. You have to set a definite time for tabling.

CHAIRMAN DANIEL: That's why I said it was debatable. Postponed indefinitely, that's what -- David.

DR. PIERCE: When a motion is made to table indefinitely or to postpone indefinitely as it is being revised, basically it's a motion to kill, so the maker of the motion needs to indicate that's what he's attempting to do, just to kill the motion. You vote in favor of this and you're just voting to kill the motion. The language suggests otherwise, but that's all it is.

CHAIRMAN DANIEL: That's right, which I think is the intent of the motioner. Yes. Tom.

MR. FOTE: That's not necessarily true. A motion to table indefinitely can come up at any time after the motion is made, and the states come back at the next meeting and says here's what we're planning to do this year.

The motion can be tabled and taken off the table and basically done. It just stops a letter from going out. I mean, so it is not a motion to kill because I've seen a lot of motions come off the table at the next meeting and basically decide and make an action.

CHAIRMAN DANIEL: The maker of the motion has indicated that his intent is to kill it, so that is a debatable motion. Now, if we want to vote on this motion, pass it or defeat it and then make another motion to table it until the next meeting when we can come back with a clearer idea of what to do, then we can do that. But the motion is to table indefinitely or postpone indefinitely. Is there any further discussion on that motion? Jaime.

DR. GEIGER: Mr. Chairman, I just need a

little more clarification. I'm a little slow right now. I mean, is the interpretation by the chair that by stating to postpone indefinitely, there is an interpretation that -- the intention of that is to kill the main motion?

CHAIRMAN DANIEL: That is my understanding, yes.

DR. GEIGER: Is that the interpretation of the chair or the interpretation of the maker of the motion to table?

MR. JENSEN: The intent is to postpone a decision on the main motion because clearly we're going to debate the impossible here if we go through this motion and you can't satisfy it. At some point in the future, we may want to revisit this because right now the states that are out of compliance have not done that voluntarily.

They've done it simply because they had no other choice. Now, if it turns out that some of us just aren't being honest and we're just not complying, then we're vulnerable and so we'll bring it back to the table to vote on it.

CHAIRMAN DANIEL: Jaime.

DR. GEIGER: Excuse me. From that explanation, Mr. Chairman, I'm convinced that the intention of the motion to table is not construed or intended to kill the main motion. My sense is I read into some intent here that it is the intention to at least resurrect this at the next board meeting at the very latest, all right, and allow us time to have the discussion and follow up any actions as necessary.

CHAIRMAN DANIEL: Vince.

EXECUTIVE DIRECTOR O'SHEA: At any time the board can basically kill a motion and at the subsequent meeting bring that motion back up again, make a new motion and start all over again.

CHAIRMAN DANIEL: Pat, call the question?

MR. AUGUSTINE: Call the question, Mr. Chairman.

CHAIRMAN DANIEL: All right, do we need time to caucus? All those in favor of the motion, signify by saying aye; all those opposed. Need a show of hands. All those in favor, raise your right hand; opposed. The motion carries. Abstentions, Anne, Georgia and South Carolina; null

votes. David.

DR. PIERCE: Mr. Chairman, this is a very critical issue regarding sampling in order for us to have assessments that we can use so that we don't end up with what we have in front of us right now in the future, which is everything is wonderful; everything is terrible. Take your pick.

So where do we now stand as a board relative to our resolving this issue about getting the necessary samples? It's unresolved; it's going to be taken up at the next meeting? Will something happen between now and the next meeting that will get us into a position where we will actually be able to vote on something? I've looked to the chair for some guidance regarding that.

CHAIRMAN DANIEL: I think the way to handle this at this particular point in time is to ask either the plan review team or the technical committee to look at these changes in landings, the difficulties in sampling the catches.

I mean, if you've got an opportunity to go out and sample on 150,000 pounds of fish versus 50,000 pounds of fish, that's a big difference. And it takes a lot more manpower. So my hope would be we could ask the technical committee to review what they need from those states that meet the requirements, come back to us at the next board meeting and we make that determination then. David.

DR. PIERCE: I would certainly agree with that; that sounds reasonable. At the same time perhaps it would be useful if those states could also offer up what they can actually provide, and then we'll be in a position to compare that which they can provide versus what the technical committee says is now a revised amount of sampling.

So we'll know whether they can be in compliance next time around based on lowered levels of sampling, if indeed that's what they recommend. So, I would encourage the states to help us out and to provide us with some better understanding as to what we can expect from them considering their budget constraints and other factors.

CHAIRMAN DANIEL: Pat.

MR. AUGUSTINE: Thank you, Mr. Chairman. Doesn't your third recommendation reflect on what Dr. Pierce was saying, suggesting that the board change the sampling requirements in Amendment 4 to more closely reflect changes in

weakfish landings from year to year?

The PRT suggested adopting a system similar to what defines de minimis status. If for the last two years a state's combined landings exceeded 2.5 percent taken from Amendment 4, Section 3.0 and the annual coast-wide landings for the same two-year period, they should be required to sample.

Would you think, based on what the PRT has discussed going through this process, that you would come up with anything different than that? Would this not be about as appropriate as you could get for a different scenario for states to sample?

CHAIRMAN DANIEL: Perhaps not. I don't know how the technical committee would feel about that and whether or not they believe that would be the appropriate thing and what they need to actually address the issues that were brought up at the 40<sup>th</sup> SARC. I have Vince and then Roy.

EXECUTIVE DIRECTOR O'SHEA: Thanks, Mr. Chairman. I understand the point that was made about process that got us down a little bit of a rabbit trail here with this vote, but it strikes me that we're spending time worrying about what didn't happen in 2003 with no way of fixing that.

I would just suggest that our energy and our focus be on 2005, that we have an opportunity to change the outcome of what goes on in 2005. Now I know we're going to have the whole thing of what did people do or not do in 2004, but I'd encourage you all to think about what are you going to do in 2005; and that may be an appropriate discussion for the next time, either right now or for the next time this board meets. Thank you.

CHAIRMAN DANIEL: Thank you, Vince. Roy.

MR. MILLER: Not to belabor this, Mr. Chairman, but I believe it was Commissioner Colvin that offered to send a letter to the board indicating why they were out of compliance with the monitoring requirements.

Is it my understanding that all three jurisdictions will submit a similar letter? Does that need to be in -- do we need to make that in the form of a motion or is that something that the three jurisdictions will volunteer to do?

And if they do that, may I also suggest that they specify in their letter what it would take for them to

meet their monitoring requirements, whether it's a matter of money, a matter of shifting priorities, a matter of manpower or just what?

I'm thinking that if it's just money or some other resource that adjoining states might be able to help with, maybe once we know why they're having the particular problem, maybe those of us who are neighboring states could help.

CHAIRMAN DANIEL: I've got Jaime and then A.C.

DR. GEIGER: Mr. Chairman, what was proposed by David Pierce and sort of repeated by Roy, I strongly support. Certainly, my vote on this motion was with the clear expectation that such actions were indeed going to occur and were initially volunteered by the state of New York. I think it would be well to follow suit with the rest of the states. Thank you very much.

CHAIRMAN DANIEL: A.C.

MR. CARPENTER: In asking the plan review team to review what is needed, one of the things that I think that may help some of the states is that if you look at the landings in the late '90s, you're looking at a 10 or a 12 million pound fishery, and now we're looking at something half that size.

Originally the plan called for a three-tiered sampling, 100, 200 and 300. Is it more appropriate now to be looking at a 50, 150 and 200 or 250 or something? Can we, with a smaller fishery, get the information we need with a smaller sample size? And, should possibly we be looking at an amendment to the plan to scale the sample size to the size of the fishery over the last couple of years?

CHAIRMAN DANIEL: Yes, that was what I was going to say. I mean, that's kind of the quandary that we're in is in order to change these requirements, recognizing that they probably do need to be changed, because there have been significant changes since we adopted Amendment 4, and so getting 300 samples now out of a tenth of the catch is more difficult.

I agree with you. I think some type of an approach where we can modify those sampling requirements, we may need to look into that. You know, certainly trying to get those samples, I agree with what Vince said, trying to focus on 2005, that's where we need to be.

The samples from the states that weren't able to produce what they were supposed to in 2003 are important states in this assessment and we need to collect that information. I don't believe that based on the motion that was approved to table this action, that resulted in any requirements by the states of Maryland, New York or New Jersey to submit a letter. So if it's the desire of the board to have them submit that letter, then I think we need to take action to that point. Pete.

MR. JENSEN: We're willing to voluntarily submit a letter, but I would ask for a clarification on the threshold first. I perceive our situation to be that we're below the threshold of 150,000 fish.

CHAIRMAN DANIEL: We'll get back to that in just a second, Pete.

MR. KAHN: I just had a suggestion. I personally think this whole section of the plan needs to be reworked. It should really -- you know, we can clarify what we need from states. I think there are some misunderstandings based on some things people have said.

I'd like to suggest first off we can come up with -- we, the technical committee -- a memorandum outlining what we need to get and suggestions as to how to get it, maybe, to all the states to help them planning their sampling.

And, second off, it's clear we're going to have to rework the exact sampling requirements based on the landings because the landings are declining dramatically, and we've got to come up with a different approach. Thank you.

CHAIRMAN DANIEL: To answer Pete's question, at the back of the plan review team report, in the appendix, are those sampling requirements for the 2005 and 2006 time period, and for Maryland it would be 200 otoliths and 600 lengths. Bruce.

MR. FREEMAN: I am perceiving a major problem. If we need the samples, as Des indicated, let's put together what we need. I mean, we're compelling ourselves to artificially collect samples which we may or may not need, or we may need more.

It would seem to me the better way to proceed here is to truly find out what is necessary and then determine -- we're willing to do anything we can to get the samples. I mean, we're trying to do everything we can.



But, for example, if we need gillnet samples from Delaware Bay and Delaware can provide them, and we need to concentrate on otter trawl surveys from the same area, then why are we collecting gillnet samples that are going to duplicate what is already being collected?

We all have constraints under which we're operating, so what we need to do is effectively collect what information is good from the biological standpoint. And, as Des indicated, it seems reasonable to have them go back and say here's what we need in order for us to do the job, and let us concentrate on getting that, whatever that sample is.

And if we need to work with our sister states to do it, if we have to work with New York and Delaware and Maryland, we'll do that. And if we can do all the otter trawl samples, then that's what we'll do. It just seems like we're making work for ourselves and then we're deeming ourselves out of compliance because we can't do it.

CHAIRMAN DANIEL: Roy.

MR. MILLER: Thank you, Louis. I'd like to suggest that we charge the technical committee with taking another look at Amendment 4 and determining what is a realistic and required monitoring and sampling scenario so that we can determine what is happening with the commercial harvest and have adequate samples to be supportive of stock assessments.

I think I like Bruce's suggestion, but I think we need further definition of what we need. And 2005, I suspect that fisheries have already commenced on weakfish. I know historically there was a Virginia and North Carolina trawl fishery that began around this time of year, and they'll be showing up in Delaware Bay in another month, so we don't have a lot of time to plan this. It would have to be a priority charge given to the technical committee, it seems to me, in order to acquire the necessary samples for 2005.

CHAIRMAN DANIEL: Thank you, Roy. It seems like that would also address the tabled motion and give us an opportunity, when we come back, to address that more fully and deal with it at that point. So, without objection, we would make that charge to the technical committee to come back to us with the appropriate levels of sampling based on the current catch levels. Does that summarize what you suggested, Roy?

MR. MILLER: Yes. I think it would be helpful to put a time in there when we would expect that report from the technical committee.

CHAIRMAN DANIEL: What's a reasonable time frame to request that from the technical committee?

MR. UPHOFF: It depends on how fast you can schedule the next meeting. I mean, I would guess it's something -- it shouldn't take a real long period of time once we've had a discussion on it. That's my guess.

CHAIRMAN DANIEL: We'll have that by the May meeting. I had Pat and then Pete and then Bruce.

MR. AUGUSTINE: Thank you, Mr. Chairman. If we're going down that path, I don't recall with Amendment 4 whether or not we were able to use, let's see, adaptive management to go through this process. Once the technical committee comes back and recommends some other scenario of sampling, will it require an addendum? Vince, could you help us with that?

EXECUTIVE DIRECTOR O'SHEA: Yes, my recommendation and off the top of the head answer is you're going to need an addendum. But, as a proposed action here and one of the decisions you might want to think about today is you ought to scale this requirement.

I heard some ideas about putting it at present level, and that's going to just put you right in a box as soon as the "present level" changes again, so I'd recommend that you ask the technical committee to scale the requirement.

And at some point there is going to be a critical mass that in order to get the number of samples you need regardless of how low your landings get, you're going to need that.

I think the question that was going through my mind is whether you wanted to pass a motion, initiate the process to start an addendum with the idea being to charge the technical committee to come up with this sliding scale, get that to the staff, we'll do the addendum and we'll come back to you in May with a draft addendum, so that you could then move forward.

And the reason I'm saying that is some people have

been whispering “emergency action” around the table and my response to that is this has been going on since '03. It's hard to see where the emergency is. I think you can move just as fast with the addendum thing.

And once the numbers get out, you'll know that in May so states can start -- you know, it seems to me you'd have plenty of time to collect your samples. All we're doing is you'd be talking about reducing and scaling down, and nobody would be penalized for getting too many samples. Thank you, Mr. Chairman.

CHAIRMAN DANIEL: Thank you, Vince. To that point, Pat.

**MR. AUGUSTINE: To that point, would you want to entertain a motion to start the addendum at this time? Then I would ask the board members to help me flesh out the exact words we want in it, but I would recommend that this board move forward with the adoption or the creation of an amendment -- or an addendum, I'm sorry -- addendum to the plan to include primarily the recommendations of the technical committee on a scaled sample basis determined on whatever format you bring forward.**

Now if some of you other board members would help me with other language and other items you want in there, please help.

CHAIRMAN DANIEL: Motion by Pat Augustine; second by Roy Miller. Pete.

MR. JENSEN: Pat beat me to the punch.

CHAIRMAN DANIEL: Bruce.

MR. FREEMAN: I think the issue is two things. Pat's talking about a scaled sampling, but my concern gets back to Des Kahn's earlier statement that in certain fisheries they need the information.

And, for example, if we have sufficient length-weight data for the recreational fishery, do we need to concentrate our time on the commercial? I would hope that this revision of the biological sampling section deals with all these issues.

Let's get it right. Our procedures are clouding our sense of moving forward here. I would hope our technical committee members could report back, so that at the May meeting we, the states, could come forward with how we're going to do it, not just here's the information and we've got to wait until the next

meeting to figure out what we're going to do.

The fishery has begun in your area, Louis, and our area, too, by that time, so I'm anxious in getting going on this as quickly as possible. And so, you know, this addendum, fine, if we have to go through it, let's do it.

I don't think anybody is going to object; everyone is going to support it. But let's do it right and let's get the information that we really need. And if we need to concentrate on one fishery, then tell us, we'll do it.

CHAIRMAN DANIEL: I think our technical committee is up for that charge. Any other discussion on the motion? Gordon.

MR. COLVIN: One suggestion I would make is that in the course of putting this together, I would urge that the development team communicate with the ACCSP staff with respect to the market sampling element of ACCSP, so that we can take as much advantage of that program and what it can do and what it is doing as possible.

CHAIRMAN DANIEL: Good suggestion, Gordon. Any other discussion on the motion? Vince.

EXECUTIVE DIRECTOR O'SHEA: Mr. Chairman, if you would, staff has helped the maker of the motion perfect the motion and just to get confirmation from the maker that we've captured his intent. Thank you.

MR. AUGUSTINE: That's fine, Mr. Chairman. Thank you.

CHAIRMAN DANIEL: And with the seconder? Roy?

MR. MILLER: Yes.

**CHAIRMAN DANIEL: The motion is moved to initiate an addendum to revise the biological sampling requirements of Amendment 4 to the Weakfish Management Plan based on the recommendations of the technical committee.** Pete.

MR. JENSEN: I assume the intention of this is to be effective in 2005?

CHAIRMAN DANIEL: Yes.

MR. JENSEN: Okay, and so it looks to me

like it's going to take longer to move the process forward to adoption than it is for us states to make plans for doing the biological sampling. So, even though we may continue the process, I think it's extremely important that the information gets out as soon as possible so we all know what it is we're aiming for.

CHAIRMAN DANIEL: Absolutely.

MR. JENSEN: Even before we finish the process.

CHAIRMAN DANIEL: Thank you, Pete. David.

DR. PIERCE: I strongly support what Pete said. Once we know what these new requirements are, they should be conveyed to the individual states, and then in good faith the states should attempt to implement those levels of biological sampling and not wait for some addendum to be implemented, an addendum that's going to require hearings and perhaps all of that.

So, we all know it's a compliance criteria. We all know that we're not ruling any state out of compliance now, that we're being understanding and doing something that makes a lot more sense; so, again, good faith efforts on the part of the states to move it forward and to get it done in 2005.

CHAIRMAN DANIEL: Thank you. Bruce.

MR. FREEMAN: I would ask Des, when he gets back to the technical committee, to also look at the issue of declining catches. You know, this scaled table will get you down to no sampling at all, so we could have a very low catch with no sample.

My question is, well, how are you going to do anything with it? So you need to look at -- there's got to be some minimum that we're going to have to sample even at these low catches; otherwise, I don't understand how you're going to do your work. I would ask that that issue be looked at by your committee and a recommendation made. I'm not sure what it is.

CHAIRMAN DANIEL: Des, to that point.

MR. KAHN: Are you saying the fact that catches are declining so drastically could make it difficult to collect data, period? I'm trying to make sure I understand you.

MR. FREEMAN: Well, if we use the present criteria for how many samples based on the catch, we'll be down to three states supplying information for the whole coast. Everyone else is going to be exempt because their catches are so small.

So my point is what minimum sample do we need and where? Do we need it geographically; and if so, we need to work together. I mean, the point that Gordon raised is they catch so many fish, to even find the fish to sample is a real chore.

But we need to realize that is becoming a reality, and we perhaps need to spend the extra resources to find those few samples because otherwise you're going to have nothing.

CHAIRMAN DANIEL: I think the technical committee has a good charge. Pat.

MR. AUGUSTINE: Yes, Mr. Chairman, to that point, Des mentioned earlier that the information he has available now through MRFSS is something, and he questioned why we had the area in there, why states were doing recreational.

It seemed to me that -- well, I thought that was going to be imbedded with what we were going to try to accomplish here, that you, the technical team, were going to come back to us and say, we are including what other sources of information we have available, and particularly MRFSS, and this will be an alternative. So maybe we have to imbed it in there or you'll come back and tell us how that will fit in.

CHAIRMAN DANIEL: No, I think that would -- and I think Des and Jim are clear on what we're trying to do is avoid duplication of effort, recognizing the difficulties that some of the states are having collecting this information.

And if we can supplement those collections through other methods or through cooperation with other states that are able to collect that information, then all is fair game in order just to collect the information. Vince.

EXECUTIVE DIRECTOR O'SHEA: Mr. Chairman, I just want to make sure our expectations are clearly outlined here. My understanding of this motion, if it passes, is that the staff will bring a draft addendum back at the next meeting; and that in voting on this, that the board would be tasking the technical committee to provide the input that is going to be required by ASMFC staff to build it into an

addendum in time for the May meeting. That's my understanding right now.

CHAIRMAN DANIEL: As is mine.

EXECUTIVE DIRECTOR O'SHEA: Thank you, Mr. Chairman.

CHAIRMAN DANIEL: Thank you. Tom.

MR. FOTE: A question for Des. I thought we had to have otoliths for all the samples, that's why we couldn't just use MRFSS data. Am I mistaken?

MR. KAHN: I didn't hear your whole statement.

MR. FOTE: Okay, one of the reasons we pushed to do recreational sampling is because I thought we needed otoliths for the guys that was doing the sampling, gathering information was also taking the otoliths out of all those fish. Since he was a dentist, he knew how to surgically remove them so he was doing us that favor.

If we go to MRFSS, we won't have the otoliths so we couldn't do the aging, so that's what I'm trying to figure out. Is it two different requirements or are we going to have to -- all the sample size -- ask the technical committee of all the sampling of length frequencies also, do you have otoliths or not.

MR. KAHN: Good question. To get the age-length keys, to convert length frequencies to age frequencies, we need age-length data; that is, an otolith and the length of the fish. Now, as long as those samples are collected from the region of a state's fishery, anywhere -- I mean, they can be applied to recreational length-frequency distributions or commercial length-frequency distributions.

To characterize the commercial catch at age, we need the length-frequency distribution of those landings. Now, for example, your recreational group could supply age-length data. They could get the otolith and the length. That would be very valuable. But we need the length frequency of the commercial landings to characterize them, as well as the recreational. Thank you.

MR. FOTE: That makes the job a lot easier.

CHAIRMAN DANIEL: All right, Pete's got the last word.

MR. JENSEN: I just want to make one

comment, and that is we don't want to find ourselves in the same position we found ourselves in with tautog several years ago where the sampling requirements exceeded the catch.

CHAIRMAN DANIEL: All right. We don't need to read it again, we haven't changed it. Do we need a minute to caucus or is everybody okay? **All right, all those in favor of the motion, signify by saying aye; all those opposed. Seeing none, the motion carries.**

All right, the last thing we have to do is approve the FMP review. It indicates those states that are in compliance and **I'd entertain a motion to accept the FMP review.** Moved by Bruce Freeman; second by A.C. Carpenter. Is there discussion on that motion? Any objection to that motion? **Seeing none, that motion carries.**

All right, now I'm really behind schedule. Sorry for the Robert's Rules debacle. At this point we're going to move right into the stock assessment report and discussion. There has been a lot of debate and discussion about the assessments. The report of the 40<sup>th</sup> SARC is available for your review.

It's a new process where they have brought in the Center for Independent Experts to review these assessments, which is, I believe, a very good move forward in that process. Individual scientists from outside of the country have reviewed what our technical committee and stock assessment subcommittee have done.

It is clear in my mind that they've done an incredible job putting together as much information as they possibly can to try to reconcile some of the differences and some of the problems that we're seeing in this.

But as the SAW reported, the problem is with the data, and that's an issue that we're going to have to deal with in the future. So, with that brief introduction, I'd like to turn it over to Jim. He's going to go through some of these things.

It's going to be an interactive presentation so that if you have questions, raise your hand and we'll try to deal with it. If it gets unwieldy, we'll get through the presentation and save some questions for the end.

But we do need to have some discussion on how we want to move forward with this issue and the things that we're facing with these declining catches. So with that, I appreciate Des and Jim being here and I'll

turn it over to Jim.

## STOCK ASSESSMENT REPORT

MR. UPHOFF: All right, thank you very much, Mr. Chairman. We finally have gotten to the point where we can talk about the status of the stock that maybe may clarify a little bit as to why some states have had sampling problems.

This is a process -- I guess we probably started this in April and have been doing a very steady amount of work ever since. The things that we've considered in this assessment are the fishery yield and the catch per effort, size and age structure, trawl survey indices, assessment models; and also something that's kind of a new addition to a stock assessment, the food web -- that's basically the forage base -- and then factors such as predation and competition.

We added a fair number of additional activities to the assessment. In addition to compiling the landings from the directed fishery, we added commercial discards by the fisheries other than the shrimp fisheries.

We have used a new technique for estimating the catch at age, which has ended up in something like greater than 200 spreadsheets that Desmond has in his possession at the moment. We've calculated some new indices for commercial and recreational catch per effort, some of which you'll see today.

We also have done some work on survey indices, creating three biomass indices, and also have added in a proportional stock density index, which is a size quality index. One of the requirements in Amendment 4 is for us to present information to the board on the size and age structure of the weakfish population, so this is a way of dealing with that.

As far as assessment models, we've done basically from simple to fairly complex, a relative F estimate, which is the catch divided by an index basically, biomass dynamic models. I got up to about 18 runs on this.

Janaka de Silva, before he left for Bangkok, had constructed an age structure production model which had a multitude of runs -- I think it ran into the hundreds or so as a sensitivity analysis -- and then virtual population analysis.

I think there's at least three tuned ADAPT runs, maybe more, and one untuned VPA. And also the final technique that was used was what I'm calling

rescaled relative F modeling. This combines virtual population analysis and relative F analyses. We've done a lot of stuff.

And, the thing about this is we did not come out with one answer. Essentially, we came out with three classes of answers that we could develop hypotheses from to look at. The first one, which surprisingly enough, was very prevalent in the more sophisticated models, the more assumptions you made.

Essentially, in all the models that we've used, they all include landings and all the recent yield is low. In the first class of results that we got, we would start with low landings, a low fishing mortality, and a very high biomass -- I mean, not just high but very high.

In some cases the models indicated near carrying capacity or a population that was skyrocketing off into the moon. These generally were constructed under an assumption of a constant natural mortality rate, which is abbreviated by M here. You guys probably know that.

Essentially, we were left with the dominant factor for that result being either the fishery just was not interested in weakfish any more or we had a huge biomass of very tiny weakfish that no one could catch.

This was not very plausible. The technical committee determined that basically the models that ran this were -- it just wasn't plausible and we were not really going to work on that or consider that much further.

That left two classes of results then. Again, we had a low yield, a high recent fishing mortality rate, a low biomass. This was under an assumption of a constant natural mortality rate, the one that we've used in the past. Essentially, the stock would be considered overfished basically because when we derived the Fs, they were high.

In the third set of analyses, we would have again a low recent yield. You can't alter that. That's the one thing that we're really measuring. The recent fishing mortality rates were low but so were the recent biomasses.

And in this case, we would relax the assumption about the constant natural mortality rate and essentially attribute the decrease in the stock to an increase in natural mortality. And under this scenario, this would mainly have resulted from things like predation competition and starvation of weakfish.

Why did these results vary so much? Well, it basically reflects both the limits of the data and the limits of the assumptions that we're using in these single-species modeling approaches. We went to the 40<sup>th</sup> SARC, which basically confirmed many of the suspicions that the technical committee has carried over the years.

Essentially, we have a data problem and things that we would be concerned about and they were concerned about were accurate catch amounts, the proper sampling of the catch, which is some of the issue that you guys just dealt with, whether our discard estimates are correct, whether our indices were accurate, and whether we've made appropriate conversions of scale to otolith ages.

This is an issue that we contended with in the mid to late '90s and really haven't revisited it, but it was one of the things that the 40<sup>th</sup> SARC was also concerned about. In addition to these data concerns, the technical committee also has concerns about whether we've really defined the unit stock properly.

There is old tagging data and new otolith chemistry data that indicates there may in fact not be a single unit stock, but it's possible that there are multiple stocks. Since we aren't able to differentiate them, we do manage and assess the species as a single unit stock.

And then the assumptions that changes in stock size can only reflect fishing mortality. This is part of assuming a constant natural mortality rate, which has been very standard in stock assessments for a great many years. And associated with these last three is also an assumption of ecological stability.

The 40<sup>th</sup> SARC concluded that substantial review is needed and that the shortcomings could not be overcome with a better model. The technical committee certainly agrees with that, but notes that this data review is likely to be a very time-consuming activity.

And considering the time line, I'd paraphrase Donald Rumsfeld, with the schedule that we have, we have to assess with the data we have and not the data we want, so there are judgments that we have to make based on the data we have on hand as to what's adequate or inadequate to make these estimates of fishing mortality and trends in biomass and so on.

And, we had a technical committee conference call on February the first. I think we had six states that

were present. Several people were sick and so on. But kind of surprising to me, there was complete agreement on five points: the stock is in decline; total mortality is increasing; there is not much evidence of overfishing; something other than fishing mortality is going on; and there is strong circumstantial evidence of increasing natural mortality. So that's what we thought as of February the first. That's what I'm bringing forward today.

So to get right into it, these are Atlantic Coast commercial landings -- well, commercial and recreational landings of weakfish, actually. The commercial time series is from the National Marine Fisheries Database and it goes back to 1950.

In 2003 the commercial landings are the lowest in the time series. The recreational landings also in a weight basis, they begin in 1981, or the landings that we used, and they are also at an all-time low.

The fishery certainly has experienced a very dramatic drop in yield, and this is the primary motivation for us to not consider the previous assessment that we have used, which indicated a very high stock and a very low F. This dramatic drop in yield is probably the clincher for everything that we're looking at.

Overall, if you look at the recruitment indices along the coast, the trend has been for them to have been low in the '80s. These are standardized to their means. It basically is the transformation, so zero is what you would consider average. Negatives are below average. The positive figures are above average.

In the '80s and into the early '90s, it was pretty much below average, shifted to above average recruitment. And, recent recruitment, from all indications, it's about average.

As far as adult weakfish data, we have four trawl surveys along the coast that we are using to generate age structure and relative abundance information, and they are, starting at the bottom; the SEAMAP segment in North Carolina; and then we go to two state surveys, which are one in Delaware Bay by Delaware and then New Jersey along their coast; and then the final survey is the fall survey conducted by the National Marine Fisheries Service that basically - - we use the data from New Jersey to North Carolina.

In previous assessments this region from New Jersey -- I'm sorry, New York to North Carolina is considered the core range, and that is what was recommended for basing an assessment on. We've

continued with that convention where we look at the status of the stock based on indices from New York down to North Carolina.

Just kind of looking at some of these indices in aggregate expressed as exploitable biomass, or basically relative weight, two surveys that are fairly coherent with each other and they're, you know, kind of within the same region and are indicating a fairly substantial decline, potential decline, in stock biomass are the New Jersey and Delaware surveys.

Both of these peaked about 1996 and have fallen substantially since then to what in 2003 are very low levels of relative biomass. This is calculated on weakfish that were 25 centimeters or greater.

As far as the fall survey and SEAMAP, they are not really so much in concert with what's going on in the fishery, and they aren't particularly coherent with the other surveys. The fall survey -- in fact, the Northeast Fishery Center's fall survey indicates an increasing stock of weakfish within the recent time period while the SEAMAP survey basically is varying without trend.

The fall survey index is not particularly passing the believability test, and a very small fraction of the weakfish in this survey are actually of size that might be of interest to the fisheries. The recent trend is very different from the other surveys.

When you look at some catch curves of these age structure data, it is suggested in recent years there has been spontaneous generation of weakfish that in fact we are actually -- weakfish aren't dying as they get older; they're actually increasing in numbers as they get older.

There is some data to indicate that these catches are related to water temperature. There may be some statistical techniques that would be able to adjust for this. And the 40<sup>th</sup> SARC experts were also fairly skeptical of its value, so we basically have treated this survey fairly lightly in the assessment.

We've also generated what I guess has been nicknamed the "Global Index" based on the MRFSS catch per trip. And this is both numbers harvested and released so that you don't necessarily have selectivity problems in these estimates.

These are lines in the water over a broad geographic area. We generated this estimate and have used it in the assessment. Essentially, it's indicating a stock that at least in the '80s on average was probably high

but it varied.

Definitely, a low period in the low '90s and then a climb that would be associated with the impositions of Amendment 2 and 3 and the management process, and then a very long-term decline since then to basically the lowest relative abundance on record.

So these are weakfish that are both too small to be harvested and also of the right size to be harvested, and from New York to Virginia. New Jersey and the Delaware exploitable biomass indices calculator are significantly correlated with this global abundance index.

So these indices are fairly coherent with each other within this core region. And, again, they're indicating a peak in abundance of relative biomass at about 1996 and a decline to a very low level by 2003. Although there's more variation in some indices than the other, you kind of get to the same endpoint between '96 and 2003.

As far as assessment models, I'm not going to go over all of them, and I'm not going to go over the nauseating methods and details. One of the techniques that is actually pretty robust is this relative F, because it doesn't make any assumptions about what natural mortality is doing.

It is simply based on a ratio of catches to average abundance in the indices. And, the values that you're seeing here do not represent an absolute value of F but do portray trends, essentially that fishing mortality, as measured through this technique, would have been higher in the 1980s through about the early 1990s, and then dropped substantially.

There is no indication from this technique of a substantial rise in fishing mortality based on these survey indices as your indicator of stock size.

We've also constructed catch curves of total mortality from the year classes in the catch at age matrix. Essentially, this is indicating a fairly high mortality rate. This is both natural and fishing mortality.

We are not making assumptions at this point about whether natural mortality is constant or not constant, just simply the total mortality was averaging somewhere maybe around one for the year classes, the 1982 through 1990 year classes. In fact, these are not years, these are year classes, so this is aggregated over their ages when they're fished.

The '91 and '92 age classes showed a significant

drop in total mortality. An estimate was not possible for 1993. And by 1994, these estimates of total mortality were rising again through the 1997 year class.

Now attributing all the recent increase in total mortality to fishing mortality alone required a large increase of killing power in all the major commercial and the recreational gears pretty much simultaneously. We could not find evidence that this had happened.

So for things to make sense, we've abandoned the convention that fishing mortality equals the total mortality minus the constant natural mortality rate. Okay, let me rephrase that to make sure I didn't screw it up.

Fishing mortality does not equal the total mortality minus the constant natural mortality rate in this assessment, necessarily. It is an option, but it's not the only option that we stuck with. We've adopted trying to estimate at least trends in natural mortality using the total mortality minus the fishing mortality.

Essentially, I kind of can demonstrate that there is a divergence from the relative fishing mortality rates and the trend in total mortality we're getting from the virtual population analysis, which is ADAPT.

This is our preferred run that uses the MRFSS indices only as tuning. Essentially, there is at least some convergence of these estimates. You know, they're showing the same trend up through maybe 1999. Then the total mortality rates are going up, but the relative mortality rates are holding about constant, so that difference would be some indication of natural mortality going up.

Now you have to bear in mind that there are some fairly substantial retrospective bias even in our preferred run. We're still debating how close we are to the reality of what the final mortality rate will be.

And by retrospective bias -- you have probably seen these in some of the other assessments -- essentially, if you go back far enough in time to about 1996 or so, 1997, when you do different runs by eliminating a year off the most current year from the assessment, you almost always get the same -- you get the same history.

But, for the more current years, as you remove a year, you get a high estimate. Okay, essentially, when Desmond did a run in 2000, this was the estimate. When this was the final year, this was the estimate of total mortality. When you went to the 2001

assessment, which starts here, the total mortality dropped. In the next assessment it dropped again.

Now it's stabilizing not too far back, but we're still not quite sure how to treat this. But essentially we're not totally comfortable with using these results just as they are. I mean, it may work out that this is actually okay, but we're still kind of debating how that's going to turn out.

And in terms of spawning stock biomass, we get the same kind of thing. If we want to know what happened ten years ago, this is a great technique. If we want to know what's going on today, there's much more uncertainty in the results.

And this has been a feature of these virtual population analysis for this species since I've been working on it. That's been for over 10 years now. This is a powerful fishery technique, but for weakfish this is a real weakness.

In terms of the age structure, though, we kind of feel like the retrospective bias within the ages for a particular year may not be that bad, so we've constructed basically a percentage of fish that are ages six plus.

Any weakfish in the assessment that is six years old or older are lumped into this plus group. And originally in Amendment 3, there were some specific concerns about restoring trophy fisheries.

Those disappeared when Amendment 4 was written, but there is a requirement to report the age structure. This is what we had done going into Amendment 4, so I'm trying to reproduce it. Essentially, we've gone from in 1999 being pretty close to what we would have considered a possible restoration of age structure down to virtually nothing by 2004.

But in the meantime, when you're looking at the age samples, the maximum age being encountered in North Carolina has basically been increasing over this period. So, the proportion of old fish, six years old and older, is diminishing, but we are adding year classes as we go on. Just a point of interest.

Amendment 4 reference points. We haven't had a huge discussion of this, but this is kind of related to the sampling requirements. The Amendment 4 biological reference points may not be relevant to this assessment.

These biological reference points were heavily influenced by the output of the previous assessment



that we've now dropped. There is a high retrospective bias in the current VPA, and the possibility of high natural mortality make it difficult to update the reference points without some careful consideration, and we haven't fully explored this yet.

Now, here is a technique that we think probably is the least biased and most plausible estimate of what is going on. It combines the estimates from the converged portion of the VPA where the VPA was in agreement with the relative fishing mortality estimate to rescale the relative fishing mortality into absolute units.

Essentially, what it is saying, the yellow line, the fishing mortality rate, which is on a biomass basis rather than a numerical basis, and it's over ages 1 through 5 rather than for what's considered the ages of the directed fishery, but essentially it was kind of at a modest level, maybe even considered a little high from '81 to '87, climbed pretty rapidly, in the late '80s began to decline, and since about '95 has been fairly low and may have started an increase up to -- still what would be a modest level.

In the meantime, the biomass of the stock, which is the weight of the stock, which incidentally should be a pretty good proxy for spawning stock biomass since 90 percent of the weakfish are mature at age 1, so most of the weight that we're measuring here are mature weakfish -- essentially, it was at quite a high level in 1981, dropped constantly to about 1989, was constant at a low level.

Then with the imposition of Amendments 2 and 3 and some of these management measures, it began to climb. And then starting at about '99 or 2000, it began a very substantial drop to quite a low level that is comparable to what prompted management action back in, you know, starting in the early '90s.

This technique can supply its own reference points. They are not directly comparable to what's in Amendment 4, but for the purposes of discussion, I'm illustrating both the biomass relative to its threshold level, which is 20 percent of an unfished stock.

Essentially, when you're looking at the blue bars, anything that's less than one is bad. It's saying that the biomass divided by the threshold, it's essentially -- at one it's the same as the threshold. At less than one it's less than the threshold.

And, sure enough, in 2003, with this technique, we are below the threshold biomass of 20 percent of an

unfished stock. F can also be put relative to a fishing mortality rate that would be associated with collapse, and in fact the decline in biomass is associated with a climb in this relative F to above one.

In this case, the relative value above one is bad. Those values occurred about 1989 to 1991. The fishing mortality was very high. It began to decline and has been at a low level that would not be considered capable of collapsing the stock since -- well, for quite a while. And even though it's climbing, it's still not really at that level.

So, essentially, the biomass appears to be very low. The fishing mortality rates appear to be moderate, perhaps even low. You can also look at surplus production and look at the trends in fishing mortality.

Surplus production is essentially the biomass of the stock that's available for harvest. That is the blue line. It has bounced up and down. When the fishing mortality rates got very high in the late '80s, surplus production declined.

As the fishing mortality rates were lowered, there was more surplus production available for harvest. Then starting about 1999, even though the fishing rates were fairly low, surplus production plummeted and is essentially at zero to negative. That is, there is no biomass available for harvest based on the results of this external production model.

In terms of what is called a proportional stock density, this is telling some of the story of the incredible shrinking weakfish. It's an animal with amazing plasticity in its size distribution.

What's a proportional stock density? It's a standardized index of size structure that's widely applied in freshwater fisheries management. It's rarely, if ever, been applied in marine management. It quantifies length-frequency data and is generally calculated as proportions of numbers of various size classes of fishes in a sample.

And the technique that's in the literature assigns the sizes based on set percentages of the world record length. For weakfish, the smallest sized fish that is of interest to anglers is considered the stock length, and that's a weakfish that's 205 millimeters or larger.

A quality fish, a fish that an angler might want to keep, is 340 millimeters. And, the quality plus PSD is basically the number of 340 millimeter fish and larger weakfish in a sample divided by the number of 205 millimeter and larger weakfish in a sample. It's

very simple, a very simple technique.

Essentially, these are the trends that you get looking at the Delaware and New Jersey data. The length sampling in these two surveys was very good. The confidence intervals on these estimates were extremely precise. Essentially, what you're seeing here are pretty much real changes in the size quality of the stock.

The Delaware series is really nice because it's like a history lesson. You can go back as far as 1966 with these data. And as you can see back in that period, the size quality was extremely low. They started to really climb in the '70s.

The trawl survey was discontinued, picked up again at what appears to be a peak in the size quality of weakfish where about 45 percent of the fish for three consecutive years were of a quality or larger size.

And then again the survey discontinued in the early '80s. When it was picked up in 1990, size quality reflected the status of the stock, which was low, began a recovery that continued to 1999, and since then the size quality has plummeted.

And these trends are generally confirmed by the New Jersey survey. Because it's a little shorter time series, it's not as amenable to some of the analyses that I wanted to do. But when you look at the Delaware time series, it tracks fishery performance very well.

It is significantly correlated with a wide variety of harvest indicators. The minimum correlation was 0.8. These were basically highly significant. It's positively correlated with the trends in commercial landings and recreational harvest; also some behavior of either fishermen or fish with the distribution of whether weakfish recreational harvest is inshore or offshore.

It also significantly correlated with the Delaware, Maryland and Virginia trophy citation time series but not with North Carolina. So, it's a pretty fair indicator of what could be going on with the fisheries along the Mid-Atlantic.

What could cause poor size quality? Well, obviously reduced growth could, and we've seen that. I'm going to show you a slide here in just a second. We also did some simulation modeling that indicates that either an F much higher than we've encountered in most assessment models would also cause this size quality shrinkage, or natural mortality much higher

than now assumed would result in poor size quality.

So, as an indication of reduced growth, this is the mean weights for ages 1 through 3 in the catch at age matrix. And if you look especially at ages 3, 4 and 5 in this, the green line, the light blue line, the dark blue line, their mean weights of age have dropped to about 50 percent or a little bit more than 50 percent of what they used to be in the first decade that we made these measurements. They are now much lower in mean weight at the same age by approximately half.

So, these PSDs are, this proportional stock density, this index, is a form of length-frequency analysis. And length frequencies integrate recruitment, growth and mortality, both from fishing and from natural mortality, essentially based on the results that we have, that the technical committee is supporting as kind of our preferred estimates.

The fishing mortality appears low. Recruitment is moderate to high. It's not declining like the landings are. And growth has definitely decreased. Given stable trends in recent fishing mortality and recruitment, growth and natural mortality should be dominant parameters.

These would be influenced by things like forage supply, competition and predation. And so the question was could we detect a signal between this size index and forage supply.

Now, a little bit of basic predator-prey or ecology for weakfish. Weakfish undergo what are called these ontogenetic diet shifts. That is, as they get older, they eat something different. They really start with fish at a very early age. The age zeros will eat anchovies and also eat all kinds of invertebrates, such as these little shrimp you see there.

By age one, they're already starting to add in bigger fish like menhaden to the anchovies and the invertebrates. And by ages two plus, their diet is dominated by fish. And in the diet studies that I've seen, these species are menhaden, spot, anchovies. And, of course, they also eat squid, another one that has shown up with some regularity.

So this early switch to a fish diet indicates that the weakfish is what you would consider a specialist piscivore. And this requires high growth, high densities of proper forage and safe foraging opportunities.

These species that undergo these kind of diet transitions face a risk of resource limitation that

delays the shift in growth to a larger size and increases their vulnerability to things like predation and disease.

So, what I'm trying to look for in this analysis is, is there an indication of a diet bottleneck, some kind of a supply short fall that would retard the growth and increase the size dependent natural mortality from starvation and predation.

So I did a correlation of looking for associations between the proportional stock density from Delaware -- this is long-term data going back to '66 - - and the major forage species relative abundance in North Carolina, Maryland, Virginia, Delaware and New Jersey surveys, a variety of surveys.

And essentially, these are where the surveys were located, anywhere from New Jersey to Delaware Bay, Maryland's coastal bays, Maryland's Chesapeake Bay, Virginia's Chesapeake Bay and then Albemarle and Pamlico Sounds in North Carolina.

And essentially, without going into nauseating detail, the quality of the size distribution was significantly and positively associated with forage relative abundance in the Mid-Atlantic region.

It was most consistent for age zero menhaden in the Chesapeake Bay and North Carolina, also with the coast-wide abundance estimates for age zeros from the menhaden stock assessment. But, significant correlations did appear for the other two species, spot in New Jersey, you know, not all surveys but some surveys from New Jersey to North Carolina.

And just to give you some idea what we're talking about, again, I have standardized the indices across the region. Well, this is the southern half of the region, Maryland, Virginia and North Carolina. There is no anchovy index for North Carolina.

Essentially, this is enough lines to show you as is rather than the multitude that I could. These are the average trends, the grand means in these standardized indices where essentially --the green line is menhaden.

It was low up through the early '70s, then was at above average abundance into almost 1990, and has been at below average since. The other species are fairly similar to that in this region. So what we're looking at is essentially -- when we started to restore these predatory species in the early '90s, mid '90s, we were already looking at restoring them on what appeared to be a diminishing trend in the forage base.

Now is there any weakfish diet data to support the idea that the main food items are in less supply? Chesapeake Bay has the only two recent studies that I was able to find for weakfish. The mid-bay, Kyle Hartman's dissertation work was conducted in 1990 to 1992, a series of wonderful paper in the Canadian journal and North American journal and so on.

And then the whole Chesapeake Bay is being sampled from a program called "CHESMAP" by the Virginia Institute of Marine Science. And essentially, what we've got is data available from a period where weakfish were still large as far as the weight at age and have now gone to small, much diminished weight at age.

And the changes we've seen, just in summary, are that the anchovies and menhaden are much less frequent in the diet. Spot have all but disappeared. The cannibalization of weakfish is noticeable and invertebrates are making up a far greater part of the diet.

And essentially, in 2002-2003, older weakfish, which here are ages two-plus, are eating about the same -- trying to subsist on the same diet they did as age one weakfish. And the one protein supplement they're getting are other weakfish.

These are kind of what the data look like: age ones in the early '90s, some invertebrates, a lot of bay anchovies, a little bit of menhaden, a little bit of spot; 2002 to 2003, the same age, a lot more invertebrates, still a good representation of anchovies and some menhaden.

When they went to age 2, maybe this big, something like that, in the early '90s, a little bit of invertebrates, a little bit of anchovies, a lot of menhaden, a lot of spot. At age 2, 2002 -- or actually any of these ages because they've basically the same diet composition - - mostly invertebrates, similar to what you see here at age 1, bay anchovies similar to what you see as age 1, a little bit of menhaden, same as age 1, and the spot are basically replaced partially by juvenile weakfish. So, that's the shift in diet composition that we're seeing in that region.

Now, weakfish morphology is adapted for water column feeding. And when you look at the literature, the clupeids are very important in their diet. And clupeids are also important to other major Mid-Atlantic piscivore.

It's labeled striped bass, because when we did the

SARC review, these guys were all from some other part of the world and may not have ever seen a striped bass, so it may not have been quite as obvious to them.

Now, based on the data again from Kyle Hartman's work within the Chesapeake Bay, striped bass and weakfish at the same age compete pretty much in the same proportions for Atlantic menhaden. And, actually, if you put spot on here, it would look about the same, although as weakfish get older they tend to shift a little bit more into the benthic pathway than striped bass do. But that would have been primarily through spot.

And this little bit fuzzy picture is one that Desmond relayed to me, caught by a fisherman in Delaware Bay. This is a fairly good-sized striped bass with a belly full of weakfish. The biggest one is up to 13-inches long.

There are a couple of other diet studies that have been conducted, one in North Carolina by Manooch and then the other by John Walter that's more recent in Lower Chesapeake Bay in Virginia that indicate that weakfish do show up in the diets.

There is a study being conducted right now by Anthony Overton and East Carolina University off of North Carolina that's indicating that by number, as of I guess mid-January, weakfish were comprising about 16 percent of the striped bass diet off of Cape Hatteras.

So, striped bass eat weakfish; weakfish eat weakfish. They all like to eat spot, menhaden and anchovies. They are direct competitors and so on. In terms of what is going on with the striped bass along the coast, I don't think this is a surprise to anybody here.

In the short-term, I'm looking at the ADAPT age two-plus striped bass biomass going up steadily from the early '80s all the way almost to 2003. The other red line you're looking at is kind of a proxy for biomass.

It's an egg presence/absence index that allows me to go back a long period of time, and it's kind of a proxy for -- it's a biomass index, essentially, for whatever it's worth; where striped bass biomass was quite high in the '60s into the '70s, crashed to a very minimal level in the '80s, and then recovered, and into the recent years.

There are statistically significant indications of competitive and/or predator-prey interaction between striped bass and weakfish size quality. So

essentially, when you start looking at the size quality in the Delaware survey, which is the vertical axis, it is a significant non-linear association that when striped bass biomass was low, size quality was high and vice versa. This does not imply cause and effect but it's an association.

In the long term you can use the age zero menhaden abundance estimates from the assessment and the striped bass biomass index to make a prediction of size quality. It's not doing too bad a job of capturing the general features as to when size quality should have been low or should have been high.

It's a significant relationship. Menhaden account for about 50 percent of the explained variation, and striped bass account for about 11 percent of the explained variation, and that leaves a fair amount of variation for other things like exploitation of other species and so on.

But, these two factors do a pretty reasonable job of recreating the size quality distribution of weakfish over this time series. If you plot some indicators of weakfish relative abundance against striped bass biomass, you get some kind of interesting trends.

This index you're looking at here is the recreational catch per trip. In order to shorten things down, I also have a slide that pretty much duplicates this with the Delaware and New Jersey trawl surveys.

Essentially, what you're seeing -- and pretty much after about 1989, which is when the green squares begin. This is sequential in time so the biomass is going up and it's also pretty much in sequence over time.

In '82 to '88, when the fishing mortalities were fairly moderate, there was quite an amount of variation. Striped bass biomass was low, but the weakfish index varied from low to high. After a period where weakfish fishing mortality rates were high, from '89 to '93, the index was low as striped bass were increasing.

As we reduced fishing mortality significantly in the early to mid '90s, the weakfish index began to climb to a peak, about 1996. And since 1996 the weakfish index has been declining very steadily as once striped bass biomass exceeded about 80,000 metric tons.

So plotted another way, using the biomass estimates we have from the striped bass VPA and from the rescaled relative F analysis that we have, you see the yellow line is the combined striped bass and weakfish

biomass. The red line is striped bass biomass, and the light blue line is weakfish biomass.

Essentially, somewhere in the late '90s we hit a threshold biomass, a little under 120,000 metric tons for both species combined. In that period, the striped bass biomass has been steadily climbing while it appears to be -- that climb in biomass towards that threshold is being offset by a decrease in weakfish biomass under the low forage conditions that we're encountering.

In terms of management options, the technical committee did talk about this a little, but it was not an extensive discussion. You can cut the fishing mortality rate to reduce the total mortality, but what happens next could be tricky given the food web and fishery complexity.

And, this is just a representation of the food and fishery web for the simplification that I've been talking about. You're starting with benthos, which go up through spot, which can go to weakfish or striped bass.

You have algae that goes to zooplankton to anchovies to striped bass and weakfish. You have algae that go to menhaden to striped bass to weakfish to the menhaden fishery. And then, of course, you have the competing demands of the various fisheries all wanting either big predators or not many predators or lots of yield or not lots of yield.

And, in the management situation you're in now, if this is really how this thing is operating on a food web-wide basis, when you cut fishing mortality, you are right there. There are lots of other things that are going on out there.

You may or may not get some kind of an expected rise in abundance just by cutting fishing mortality if these food web considerations are really driving the show. So with that, I didn't entertain questions on the way so I'll entertain some now.

CHAIRMAN DANIEL: Thank you, Jim, for an excellent and thorough report. Let's start with Bill Adler.

MR. WILLIAM A. ADLER: Thank you, Mr. Chairman. Yes, that was everything I ever needed to know. It just looks to me that -- I was surprised to see where the fishing mortality wasn't going anywhere, and yet there was this drastic cut in weakfish.

And the only thing that I can see from your presentation here is that the culprit, once again, is striped bass and perhaps even their own weakfish. I mean, I saw it in the last meeting where striped bass hit again. And, so you're saying that if you cut fishing mortality, it may not have that much effect on the stock.

MR. UPHOFF: Yes, it may not but it may. These types of things, when you start talking about food webs -- when you've gone from the period we used to operate in with these assessments where overfishing was the dominant feature driving stock dynamics and you've released that pressure, you're open to a whole world of basically the technical stuff is non-linear interactions.

You don't necessarily, with each proportional decrease in striped bass, get a proportional increase in weakfish or something like that. It's very difficult to predict where these things are going to go from management actions.

CHAIRMAN DANIEL: Des and then Tom.

MR. KAHN: Thank you. I would like to suggest to the board to consider the assessment in this light. We have strong evidence of a stock decline, which is quite obvious; however, some of the data indicate otherwise, primarily a couple of trawl survey indices.

At this point, we have basically concluded that evidence notwithstanding, we have a severe stock decline. Now, why? The reason is an increase in total mortality. We have evidence of that from one of the trawl survey catch curves. It's correlated with the catch at age matrix catch curves.

Now the question is what is the source of that increase in mortality which had declined to relatively low levels by, say, the mid '90s? It's either got to be fishing mortality or natural mortality.

We have two hypotheses going. There is some evidence for fishing mortality increasing. Some of the ADAPT runs indicate this. We have had problems with instability in these estimates. We are still -- at least, I personally am still in the process of trying to evaluate those in light of some of the other analyses.

So, at this point I personally cannot completely rule out that fishing mortality has increased, although there is evidence that it has not to the level that could cause this stock collapse. I think we as a committee

have not been able to really thoroughly sift through this because we had one conference call.

Several people were absent. I think we need to thoroughly evaluate some of this evidence as a committee before we can fully conclude it's not fishing mortality that has caused the decline. That's where I'm at right now. Thank you.

CHAIRMAN DANIEL: Thank you, Des. Tom.

MR. FOTE: It was really an interesting presentation. I looked at it and it basically sent kind of chills up and down my spine because I remember starting this weakfish problem back in '88-'89-'90.

I remember the reason we're sitting here in the form we're sitting here is because Congressman Carper wanted to put a bill in and put a bill in to basically hand the weakfish -- to give the weakfish like the Striped Bass Conservation Act so it drove us to go to actually the Atlantic Coast Conservation Act was really because of weakfish. That's where it started.

Back then 50 percent of the weakfish we estimated were being killed in the shrimp fishery. That was blamed on the states of, you know, the southern states, and that's why a lot of them are still sitting on the table even though they don't catch a lot of weakfish because they were the culprits.

The other culprits were is that we were basically selling -- from Cape May, New Jersey, and North Carolina we were harvesting the fish before they were 9 inches long. We were basically selling them in a pan fish market, and the huge troll survey and tons of fish were going into the market like that.

So we thought if we corrected those problems and dealt with those issues, we'd be rebuilding the stocks as we go along. We put in strict regulations. We actually put in size limits and let the fish spawn at least once or twice, sometimes even three, because they spawn at young ages.

And I also was wondering -- I didn't see shrimp. I know I saw some at the very -- but I think in Barnegat Bay and Raritan Bay shrimp play an important role more so than maybe bay anchovies in some of those areas too; because when we catch them, that's what we find inside when we've got them.

We also have seen a couple of other things happening in this time period, not just striped bass. We always

see striped bass as the easy culprit. We've seen the croaker population go a dramatic increase.

I want to know the relationship with that croaker population, since they are both in a similar geographic area. I've also seen the squid fishery, which basically made up a diet of the striped bass, bluefish and everything else which was a competing fish, you know, competing forage species.

That fishery has really gone up in the last ten or eleven, twelve years. I know the processing in New Jersey alone. There is a whole thing -- you know, also the sand eel population in the Mid-Atlantic Bight basically collapsed about '90-'91-'92.

The other thing that concerns me, we're looking at these two species, and they were both going up dramatically, striped bass and weakfish, until about 2001 in some areas of New Jersey. We saw tons of weakfish and they both -- the population of striped bass was recovered in '96.

That's when we put the word out then. I'm just trying to get a history perspective of where we started from and where we are now, and I'm looking at a fishery after we put -- the same thing what happened with bluefish, we put in strict regulations.

We basically said we were going to -- at that time when the stock wasn't collapsed, the stock started collapsing after we put the regulations into place, so it makes me kind of nervous. We always think that we have the answers and we basically manage fishermen all the time, and sometimes just not the fishermen that are basically causing the problem.

I know that's a long little speech there, but I figure some people who are new sitting around the table don't know where this started. It's good perspective to look at. But, yes, I remember sitting here -- and also the fish excluding device.

One of the things that Bill Hogarth did when he was in North Carolina was that they were basically using scraps for those fisheries. There was an economic incentive to do that because you used to get free ice from the ice house, so one of the things was to basically eliminate that so that the scrap wouldn't come in any more.

So I find it difficult again just to leave it at overfishing. There's got to be some other factors in here and it's not just striped bass. There's got to be other factors besides that.

CHAIRMAN DANIEL: Dave Pierce.

DR. PIERCE: Well, this is a fine kettle of fish. When I first came in to ASMFC weakfish management a number of years ago, first and foremost I had to face, as did this board have to face, the absolutely abysmal percent age composition that we faced at the time, age six and older fish, and we really did try to modify our plan, and I guess we did to try to recover that percent age composition and now look where we are.

We're back to 1 percent of the population being older fish, six and older, for a number of different reasons, I guess. I must say that you gave us an excellent presentation. It's certainly a very thorough evaluation and description of what took place at the SARC, so I appreciate all the effort you and your colleagues put into this, especially some of the other aspects of it that are tough to grab a whole of such as the food web dynamics, which, of course, we're now focusing on with menhaden and other species.

You said in your presentation the conclusion was that the stock had declined severely or dramatically. Why didn't the SARC conclude that the weakfish stock has collapsed in light of the fact that, as you indicated and as shown in the figure, we now have negative surplus production, which means that there is no longer any biomass available for harvest.

We've got this absolute abysmal, embarrassing age structure facing us now, that 1 percent of the population being age six and older, and, of course, depending on the figure you look at, but most of the figures seem to indicate that we now are at historically low levels of biomass.

So, all of this suggests to me that we are in dire straits with regard to weakfish management and that something rather dramatic needs to be done, all the while recognizing that there are other factors affecting weakfish abundance.

But, still, all the signs point to the need for this board to take some rather drastic action. So, again, why didn't the SARC conclude that the stock has collapsed?

And my other question that's somewhat related to that question would be, where in this document, where in this SARC document does it describe that recruitment continues to be of moderate levels?

MR. UPHOFF: Unfortunately, we went to the SARC with an incomplete assessment, so not all

the information that was presented here was available for the SARC. And given that it was very preliminary, they weren't really willing to make judgments as to stock status other than to note the conflicting signals between the landings, the indices and some of the assessment results that were presented to them.

So, to that degree, some of this information was not totally available to them at the time. And considering that it was not a complete assessment, they were very reluctant then to make those kinds of judgments.

DR. PIERCE: Well, nevertheless, I would conclude from your presentation that you and your colleagues are just about that close to concluding that indeed there has been a stock collapse.

I mean, Desmond did indicate that he thought that it would be necessary for the technical committee -- I believe you said the technical committee -- to further reflect on all of this information and maybe give us some different advice down the road, and that's where I'm in a bit of a quandary.

I don't know whether it makes sense for us to wait for further technical committee review of this document and some additional recommendations from them or whether it's now time for us to as a board make a recommendation that the plan review team -- I believe that's the appropriate group -- for them to rather aggressively move forward to address a number of issues that I would be more than willing to outline that scream for some rather dramatic action on the part of this board.

CHAIRMAN DANIEL: Thank you, David.

DR. PIERCE: I interrupted when Desmond was going to I think respond to one of my points.

CHAIRMAN DANIEL: To that point, Des.

MR. KAHN: Well, I wanted to respond to your question about the SARC. When we went to the SARC, we had several ADAPT runs, we had the biomass dynamic models available. And, using the trawl survey indices before we culled through them, following the SARC, most of those models indicated the stock was at a high level and F was low, because that is what the trawl survey -- when you put all four of them together, that's the picture they give the model. That's the input.

And it's erroneous, we're now convinced. We've done further analysis on these indices and found that

two of them at least have biologically implausible results; that is, increasing abundance as a year class ages. We've done further analyses without them.

Also, the surplus production calculations which you've mentioned, which show negative surplus production recently, that modeling work had not been done by then. It has been recently completed, and so they didn't have those specific estimates at that time.

We went there. We said this is not a complete assessment. We don't consider this suitable for management advice, and they said the basis was, okay, it's work in progress; we'll take a look at it and try to advise you. Thank you.

CHAIRMAN DANIEL: Vince.

EXECUTIVE DIRECTOR O'SHEA: Thanks, Mr. Chairman. I assume what's going on here is we're asking questions of the technical committee and the stock assessment group of their work. I have four very quick questions along those lines.

Maybe I will just sort of run them down. In order to save time, you could maybe respond to them after I ask them. The first would be in the implication of a relationship between striped bass abundance and weakfish, which you brought out, Jim, I was just wondering had the committee gone back, say back in the '40s and the '50s, perhaps, and look at some high levels of striped bass abundance then compared to even estimates of weakfish abundance and whether that gave you any kind of a clue?

The second would be if your estimate back on the previous stock assessment of the biomass was incorrect and had been overstated, then wouldn't the current fishing levels or subsequent fishing levels result in a high F?

The third is you said that two sources of mortality would be natural mortality and fishing mortality, but isn't entrapment and entrainment, say particularly along the Delaware complex, isn't that an issue and how did your modeling deal with those issues?

And then the last is regarding F. While I understand reducing F might not restore the stock, how would F, if left alone or increased, how would that help restore the stock? Thanks.

MR. UPHOFF: Okay, and you expect me to remember all four questions in sequence or will you prompt me? Okay, you're talking about old data,

assessments that go back to the '40s and '50s.

Essentially, through the process that we operate under, which is heavily influenced by the Northeast Fishery Center, we don't have complete harvest data back that far. We only have commercial harvest data.

Our assessments essentially start 1981-1982 when the MRFSS estimates are considered good. We also wouldn't have any abundance indices that I'm aware of that go back that far for these species that we would even consider reliable.

EXECUTIVE DIRECTOR O'SHEA: So the bottom line is you didn't look at it?

MR. UPHOFF: Well, I looked as far back as I could get with what I could gather. That's kind of one of my things I kind of like to do. That's why I used that striped bass index coupled with the proportional stock densities.

That gets me back at least to 1966 with data that resembles stock assessment data. The rest of it you would be comparing landings, which sometimes could be a proxy for abundance, but it can also not so you have to be very careful, but that would be something that -- well, you can do it.

I'm not quite sure when you're all done -- well, if you did it, you would know what conclusions you would reach, but essentially a lot of that data I'm not aware that it's available. I've gone back as far as I trust.

EXECUTIVE DIRECTOR O'SHEA: You didn't do it and I understand the difficulties in doing it. The next one.

MR. UPHOFF: Okay, the next one was something about high F; a question mark is all I got.

EXECUTIVE DIRECTOR O'SHEA: Well, if you were off on the initial -- if you were off on the last estimate of biomass and you're confident of fishing mortality but your biomass original estimate was low, couldn't that then generate a higher F than what you're looking --

MR. UPHOFF: Well, the thing is that the assessment, it's not like you're using the old -- when we kind of had to abandon the old assessment, you don't keep the biomass estimates or anything else. The only thing you really keep are the landings and then you're trying to -- then you're processing that information differently.



I mean, yes, that is an alternative explanation as the biomass has dropped and the total mortality has gone up, that the change is not necessarily -- does not have to be due to natural mortality.

It can be due to fishing mortality. But, again, in order for that to have happened, the killing power of the gears had to go way up simultaneously here in recent years, and basically all our survey indices have to be wrong and so on.

So it's not really -- it's a possibility but it's not well-supported by the information. There is some information that would support it but not all.

EXECUTIVE DIRECTOR O'SHEA: And then the other one is just the entrapment/entrainment, was there any trend there that might help, a clue there?

MR. UPHOFF: You know, I'm on this power plant entrainment committee, and we've had enormous difficulties just doing what we did with the menhaden. Actually, Des is a lot more familiar with that because he has had to wrestle with that in Delaware Bay.

I think I'll just -- it's not something that's the normal purview of an assessment. The lesson that we're taking from this power plant exercise is that mathematically it's possible. We have a plausible method of including those losses.

But if you think you have a data problem now, when you're trying to build entrainment estimates coastwide, you've got a huge problem. But, Desmond might be able to put Delaware Bay in more perspective than I.

MR. KAHN: Vince, I just want to respond to that question about the past assessment update where biomass was overestimated by ADAPT in recent years due to a retrospective bias. We tried to make that clear at the time.

I mean, unfortunately, those unvarnished ADAPT outputs have developed a life of their own, and they portrayed a stock that was basically going into orbit. Now, if in fact biomass was lower, you are correct that F would increase, and that is what has happened now that we've updated the ADAPT with additional years.

Now the 2000 estimate of biomass is much lower and the F is significantly higher, but it's not necessarily to

extreme levels. It has increased. The power plant stuff, the utility in the Delaware River estimates they kill 17 percent of all weakfish produced in Delaware Bay.

That was based on years in the '80s, Roy, was it primarily, data from the '80s and early '90s, maybe. Now, I estimated that -- I did a report on this when they were trying to get their permit.

I estimated that if that amount of weakfish had grown up, it would be a larger quantity of biomass than our total landings. Okay, however, that said, there is no evidence that there is some kind of increasing trend in that that has caused this recent decline.

MR. UPHOFF: I guess, I'm taking umbrage with Desmond. If the ADAPT output is indicating F is going up, what it is really indicating is total mortality is going up. If you hold natural mortality constant, the implication is that fishing mortality is going up.

If you look at the trends in relative fishing mortality that we have that are stable and the total mortality is going up, that implies that the natural mortality is going up. So it depends on, you know, who you've got by the tail on this one, I guess.

CHAIRMAN DANIEL: Thank you, Vince. I think we need to back up one second and take into consideration the SARC report. I mean, the bottom line is their recommendation was that the fundamental problem confronting the commission was that there was inconsistency in the input data and that this would not be resolved by applying additional models, but required that the input data be carefully analyzed to identify the reason for the inconsistency.

And for that reason, the assessment results were considered invalid for management purposes until we were able to resolve these discrepancies. And if you will take the time to review some of the independent reviewers' comments, they go through and discuss a lot of the MRFSS studies, the Delaware Trawl Survey and all of these various other surveys.

So I think until we commit to resolving these data issues and problems that we have and determine how these indexes relate to overall abundance, we're going to be in a scrape in terms of trying to determine exactly what the stock status is.

The bottom line is that the landings have dropped off dramatically. We're all hearing from our constituents about what has happened to this recovered weakfish

population. So I think that's the hand we're dealt, and how do we deal with that as a board. I think those are important. I think to keep that in mind is important at this juncture. I've got Anne and then Bruce and then Roy and then Bruno and then David. Anne.

MS. ANNE LANGE: Thank you, Louis. That basically was why I was waving my hand for the last little bit. We started off right from the start with Des saying that the stock assessment committee has not had a chance to meet except once and really go over the input and the comments from the SARC.

The Center for Independent Experts had four reviews that were provided to us. They listed a great number of specific issues that the stock assessment committee can address. They also indicated that it was premature to look at any of the multi-species interactions because there were so many concerns with the rest of the assessment.

I would push that we really need to focus on the single-species assessment things as suggested in the SARC review and as Des has indicated that he feels that the stock assessment committee is ready to do, to start addressing.

CHAIRMAN DANIEL: Thank you, Anne. Bruce.

MR. FREEMAN: I had several questions relative to Jim's presentation. One deals with the food web study. What was very curious is in the early 2000-2001-2002, there was a large incident of spot in the diet of weakfish and then that dropped off.

When we saw the dropoff of spot, we saw a tremendous increase in croaker, and yet that didn't show up in the diet at all, and that's very strange. I'm just curious if there is an explanation for that?

MR. UPHOFF: There's not an explanation for it, but historically, actually, there was a paper done in either the '50s or early '60s that indicated, like in the Chesapeake Bay, that striped bass in fact ate a good bit of croaker, actually spot and croaker during the winter.

A paper that followed it indicated that when they kind of went and really looked at how -- this was striped bass because people generally like to gut striped bass a lot more than they like to gut weakfish -- but that croaker, really, in areas where they were relatively abundant, they really weren't showing up in the diet, and that's been kind of a general

observation I think.

I don't know what it is about croaker. They may be faster. They're sure as heck -- you know, there are all kinds of sharp spines and plates and so on on them.

But, they apparently have a better avoidance mechanism for predation than the other species. I mean, my analogy is like for live bait fishing. If you put a live spot on the line, a bluefish will come from miles away and nail it within no time. A croaker, it's a little different story. Something will try and eat it, but it takes lot longer.

I don't know how to quantify it, but they really don't show up in these diet studies even though they are -- their relative abundance or their fishery yield is much higher now than it used to be. They don't appear to be a suitable substitute, at least not in this region.

MR. FREEMAN: One other observation. I know many of the graphs you had dealt with Chesapeake Bay and the diet of weakfish relative to bay anchovy and the invertebrates, and it appears that differs in the Delaware Bay, at least recently, where the bay anchovy population tends to remain at a very high level.

And the most recent information I've saw of the diet of weakfish, that diet remained 80 percent bay anchovy back in the '70s and '80s and up to the present time. It just may be a function of availability of the bay anchovy. I was just curious if you have any information other than the Chesapeake for the diets.

MR. UPHOFF: Yes, actually, the paper I prepared on the food web I, to cut things short I didn't really go into nauseating detail about this stuff. One of the things that's very noticeable with these forage indices is the trends essentially in Delaware Bay are quite different from the rest of the region.

You know, they seem to be varying without any kind of a trend. Now whether it's due to inadequacy of the indices or it's a true trend of the data, I can't really say. When I assembled this stuff, I wasn't making judgments about whether that's the best estimator or not the best estimator.

But the trends generally in New Jersey and Delaware for anchovy and menhaden are different than they are for the rest of the region. But spot, your New Jersey or off your trawl survey does indicate the same general phenomenon that you see in the lower Chesapeake. Actually, North Carolina is where the

trend is different. It seems to be trending upwards rather than declining like it did across the rest of the region.

As far as Delaware Bay diet studies, there was a very good one that was done by a University of Delaware student in the mid- 1980s. Weakfish diets in Delaware Bay, as best I can recall, were dominated by anchovies, but menhaden were present as were juvenile weakfish were kind of the dominant items in that study.

But I say I've written up a little -- one of the reports that Des forwarded to everybody, I go into more detail about that; and, honestly, after all this today, I can't really quite get it all down specifically.

MR. FREEMAN: And just one other observation relative to New Jersey's trawl survey. It seems very curious because we keep track of this, that in the fall there appears to be fairly good abundance of young of year fish.

They're migrating southward along the coast. But, we just don't see them the next year as one year old, and that's difficult to explain, and maybe some of the explanation is that they end up being a major prey item and don't live to be one-year-old fish.

MR. UPHOFF: Yes, essentially I plotted that up, and you do have these trends that are fairly optimistic in recruitment. But when you look at those biomass indices or the MRFSS indices, they're steadily declining now even though the recruitment level doesn't appear to reflect it.

Again, it may be that those maybe aren't the real trends in recruitment or that our assumption that that recruitment stream is continuous through time isn't a very good assumption any more because they're being eaten, starving to death, or whatever. Natural mortality has increased.

CHAIRMAN DANIEL: Yes, we're getting very hypothetical here, and we've got 15 minutes to deal with these issues. I think that if we're going to take any action, if we're going to try to do anything here, I think we need to make a move. I've got Roy.

MR. ROY MILLER: Thank you, Mr. Chairman. I'm trying to synthesize in my own mind everything I've heard here this afternoon. I believe one of the conclusions I've reached is that our stock assessment scientists are not convinced that a rising F is causing our perceived problem with low stock abundance, although there may be something to a

shrinking stock of fish being fished more efficiently perhaps, as has been noted in other stocks under conditions of stock shrinkage, fishermen target and make their individual trips more efficient.

However, since I'm not convinced that stock is increasing recently, I remain unconvinced what to do about this particular problem. If it's a rise in natural mortality, and the evidence certainly is pointing that way, I don't know where we should go management wise, so if anyone has any ideas, I'd certainly like to hear them. Thank you.

CHAIRMAN DANIEL: Thank you, Roy. Bruno.

MR. BRUNO VASTA: Thank you, MR. chairman. I agree with Roy and the fact some of the things I was going to say he said as well. I think, again, with all of the implications as to what is happening with the weakfish over these last couple of years that the report has been going over, does it seem necessary that we initiate any kind of an emergency provision to try to save these fish?

CHAIRMAN DANIEL: I've got David Pierce.

DR. PIERCE: Well, I have concluded that I'm willing to buy into the executive summary's description of where we stand right now with regard to this particular stock, and that is the stock has declined. There is enough evidence to demonstrate that.

And, frankly, in the second paragraph it says, "In sum we find that the great preponderance of the evidence indicates that weakfish abundance and surplus production has declined to low levels." I think very low levels, alarmingly low levels, for that matter.

Then at the end of the paragraph, there's another important part of this conclusion by the stock assessment subcommittee. I think that's where this is from. Yes, Report 2. The evidence points to an increase in natural mortality, the primary causative agent in stock decline, but then it says "While fishing has not been an apparent cause of the stock decline, management could reduce total mortality if fishing mortality were reduced. Such a reduction in mortality would not guarantee stock recovery; however, it could slow or eliminate the decline or possibly even allow the stock recovery to some extent", and it goes on from there.

So, anyways, something needs to be done by this board, and I'm almost ready to make a motion that would have the plan review team develop some management recommendations in response to the technical committee and the advice – well, the advice from the stock assessment subcommittee.

But I'm not going to do that, because I think we need to give the stock assessment subcommittee a bit more time to finish their job, because it seems that they feel they do need more time to finish their job.

If I'm wrong regarding that particular conclusion on my part, please let me know, because if you feel you've gone as far as you can go with this assessment, then I would like to see this board take some action that would direct the plan review team to move forward to provide us with some management recommendations that would respond to the low percent age composition of six and older fish, the fact that surplus production now appears to be negative, there is no more fish available for harvest.

That may translate into no more directed fishery, I don't know. But what does that conclusion mean? There are no more fish available for harvest. It's a very pretty significant conclusion for the group to have made, and that's the most recent finding I believe Desmond said that they've come to.

So, Mr. Chairman, I would ask for some further guidance from those who have presented this assessment, members of the stock assessment subcommittee, do they need more time? Do they feel that additional time would bear fruit in terms of helping us understand where we are right now with regard to weakfish?

Where is this biomass? Is the surplus production negative? Because if it's negative, then we'd better respond relatively quickly and in a real aggressive manner; otherwise, we'll continue to perpetuate what appears to be a stock collapse; or if not a stock collapse, we're on the verge.

CHAIRMAN DANIEL: Des and Jim, to that point.

MR. UPHOFF: Well, I think we could use - - okay, in the short-term we could probably use a short period of time or a period of time to synthesize this a little bit more. You know, we're under the deadline. We got it done. This is where we stand.

I can't say that I'm completely comfortable that we've thought everything out. But, again, as of

February the first, when we had our meeting kind of in general, we had the five conclusions and some of the supporting evidence for it.

In the long-term, if you're talking about re-evaluating all the data, that is not a short-term project and making -- if you want to wait that long, if you think you've got the time, you know, we can probably go back through this.

But again where we were left was with the data we have at hand, with the best evaluation we can make, this is the best evaluation we can make of the status. We could use a little more time to synthesize this stuff.

But as far as some kind of a major retooling of the assessment, I think that's a year or two years away. It's really a lot of work to go back and investigate the basics of what we're doing. So, I guess, yes, some more time to talk about this would be a good thing.

Because, at least in my opinion, what is going to happen if you reduce the fishery is unclear because the fishery is really reducing itself very rapidly.

DR. PIERCE: Mr. Chairman, if I may, that's my intent, my suggested approach, that we have the assessment subcommittee do some refinement, some crystallization, further reflection, but by no means go back into the data base and do something that would be time consuming.

We don't have the time, I suspect, for any sort of an in-depth, once again, you know, an in-depth review of that which has already been reviewed, at least to some extent, by the SARC. And once that information comes to us, then the board should be prepared to meet and to aggressively deal with what appears to be a rather deplorable situation as it relates to weakfish.

MR. KAHN: Let me just say one thing, Louis. At our conference call, which consisted of six members of the technical committee, we concluded that a reduction of fishing mortality by definition reduces total mortality.

Z equals M plus F; therefore, that is a management action that fits a stock decline. That is an appropriate response. We were not able to conclude that would reverse the decline. But, we discussed, you know, this subject, of course.

However, my problem is at this situation I don't feel the whole committee has had input and really

weighed and evaluated all the aspects of this. I don't think that conclusion will change.

Now if we were to meet together and decide there is significant evidence here that fishing mortality is playing a role, that would give even more impetus to such a course of action. But nothing contraindicates that at this point.

CHAIRMAN DANIEL: Thank you. Pat.

MR. AUGUSTINE: Thank you, Mr. Chairman. I think the last statements pretty well sums up where I was going. I think all the information I gathered from this, the pros and cons and so on, it appeared early on that you were recommending we do nothing. We needed more time for you to finalize the next step, that you weren't recommending any action. And so with that, at this moment, that was -- well, one of you.

MR. UPHOFF: Well, we weren't really necessarily charged with recommending action. We were charged with conducting a stock assessment. We've at least made some evaluation of the possibility of if you did this -- if you cut F, maybe something good will happen.

You know, that's not very definitive but I'm not sure we'll ever get much better than that. If it's really a food web problem, it's going to be very difficult to understand, make projections. That's going to be extremely difficult because the type of modeling you need to do probably doesn't exist to really do it with a lot of faith.

MR. AUGUSTINE: To follow up, Mr. Chairman, I still have that queasy feeling that in response to your last comment to Dr. Pierce was that you didn't feel, Des, you didn't feel there was any immediate action we had to take right at the moment. Restate please, because I know I was listening real hard because I think we're going in circles.

MR. KAHN: Okay, maybe I wasn't clear. We discussed at the conference call what management action would be appropriate. We know there has been -- we believe there has been -- there is significant evidence that there has been an increase in total mortality that has caused the stock decline.

While some members of the committee felt that since there is evidence this is -- at least there is significant evidence this could be due to an increase in total mortality as opposed to fishing mortality, that might not have been the cause of the decline.

But we did come to a consensus that reducing fishing mortality reduces total mortality, therefore, could at least slow the decline, possibly stabilize it or possibly lead to stock recovery.

At this point we couldn't go beyond that conclusion. Nothing we concluded or nothing I tried to say would suggest that management should not reduce fishing mortality at this point. I didn't mean to give that impression. If I did, I'm sorry.

MR. AUGUSTINE: That's much better. Thank you.

CHAIRMAN DANIEL: I've got Tom.

MR. FOTE: I gave you a brief history of where we started in 1990 and all the regulations we've put in since that period of time. I asked the question a couple of years ago, when we basically started talking about a two-fish limit on bluefish and started talking about a real restricted fishery and the basic question I asked if we shut the fishery down right now to commercial and recreational fishing, would it make a difference.

At that time I asked the scientists and I got an answer, not that we can basically show you. What I'm ready to do -- because we have put dramatic regulations in place. As a matter of fact, we just reduced the recreational catch in Delaware and New Jersey,

I don't care if we went down further on the bag limits, it wouldn't make a difference. We're not catching the fish. The fish aren't there. Before I would go out and look at reducing the commercial and the recreational catch even further at this time, I've got to find some reason for doing it.

And I can't in my mind justify right now that if I shut the fishery down or if I did something to that effect, it would make one bit of difference in what the stock would look like, and that's what I want an answer to and I don't know if you can even give me that answer in a short period of time.

I'm not asking for it today, but that's when I have to make a decision like that. Or, would it basically help in the recovery? We looked at bluefish. We're right now at a quota, that we're giving quota away every year.

We're seeing the recreational sector, they're not harvesting yet, yet we have that quota there very year

that's not even being harvested with the regulations we have in place there. I am looking at this as a similar situation.

I have to be convinced otherwise, and that's where I'm concerned at, because we're talking about -- we did away with a fly net fishery in North Carolina. We put BRDs in and a whole bunch of stuff, and it doesn't seem to be having the effect. Before I put more regulations in, I want to know if we put those regulations in, are we going to rebuild the stocks.

MR. UPHOFF: Can I respond just briefly? Those things were done that you're talking about. There actually was a response, and it was positive but it wasn't sustained. Other things have overridden the fishery, possibly have overridden the fishery considerations, the fishery management actions. I mean, there was a response but it didn't take.

MR. FOTE: I could understand if we relaxed the regulations, but we have not relaxed the regulations. We have actually gotten tighter on the recreational regulations and the collapse still went down. And these are more restrictive regulations than they were when the stock was still growing, so that's what I'm trying to figure out here.

CHAIRMAN DANIEL: Well, here is the problem we've got. It appears that the work that the technical committee has done has at least shed some evidence, and it's kind of appropriate that this meeting followed the Menhaden Board meeting this morning, that we've got some ecosystems affects here.

And by going in and taking some action, to take action to reduce mortality without some kind of a projection as to what the impacts of that reduction and that impact to the communities is going to be, is going to be a tough sell.

And so when we're sitting here looking at, well, let's go ahead and reduce by an additional 50 percent, but let's allow the striped bass stock to continue to grow at leaps and bounds, you know, we're getting into a multi-species approach here that I'm not sure we're ready to do.

I think that what we need is we need to find out exactly what would the ramifications of reductions be. I mean, what I'm hearing around the table and from the fisheries along the coast is that really a lot of it has turned into a bycatch fishery.

And so by putting in a complete moratorium, as has been suggested maybe around the table, would just

result in a significant amount of discards.

So what I think we need is we need to have the technical committee deal with the issue of the compliance with the reports, but also come back to us and tell us what is your final answer in terms of what needs to be done and in terms of what are the impacts of what we propose to do.

Because, if we reduce by an additional 50 percent, it's a reduction of 50 percent from what? North Carolina has reduced by 75 percent over the last three years, so what do we do to reduce any further?

I think we need to find out from the technical committee, Number 1, do you think fishing mortality is having a significant impact on this stock status? Number 2, if we reduce fishing mortality, can we project any kind of impact of that?

And, Number 3, if we do have to reduce fishing mortality, how do we do it as opposed to just reducing the bag limit that's going to have no impact, because nobody's catching the bag limits anyway. So it seems like to me that's sort of the approach we can take with that specific direction and any other direction you all may have, if you agree with me, to the technical committee on the types of -- because this is a serious issue.

I know it is for all of you because I've heard from a lot of the board members, a lot of constituents asking questions. We need to resolve this problem. And it's a tough problem.

But, you know, we're here to do it, and so if you have other charges to the technical committee or you have an alternative approach to mine, we need to hear about it so that we can move forward and deal with this at our May meeting. Gordon.

MR. COLVIN: Do we have a peer-reviewed analysis that supports the representation that increasing natural mortality is the cause of the predicament that we're in?

MR. UPHOFF: No.

MR. COLVIN: That's what I thought. So we're sitting here talking as though we did; we don't. And I really think the significance of that needs to be considered by the board.

Yes, we've been talking around and talking around and talking around, and part of the problem we're in today is that we don't have complete peer-reviewed

stock assessment advice, and we have not yet had an opportunity for the entire stock assessment subcommittee and technical committee to completely sit back, digest what advice we do have and the analyses that have been completed and presented to the board and give the board management advice based on that.

That's why we're here, I think, and that needs to happen. You know, yesterday we sat here and had a Lobster Board meeting; and if you'll recall, one of the lobstermen from New York spoke about the frustration that they perceive in terms of management's need or management's direction to restrict fishing mortality in a fishery resource that has collapsed largely as a result of well-documented natural mortality issues.

Why is weakfish any different, assuming that that's what has happened? I'd like that question addressed. I just used lobsters. I could have come up with any one of probably ten or twelve examples in the 25 or so years I've been involved in this business.

I sort of agree with Dr. Pierce. When I look at the conclusions I'm looking at in terms of what's available for surplus production, I'm wondering why aren't we directing that a plan development team be created to work with the technical committee to come back and present options for addressing what we can do to reduce mortality in this fishery, mortality from any source.

I think maybe that's the first step we need to proceed in. And if that means we need some time for our technical advisors to do some work to tee that up, so be it, let's get it done.

And I also think -- I allude back to advice I think I heard from the chairman earlier to the effect that there were specific recommendations that came out of the SARC about resolving some data deficiencies. I'd like to see those be reviewed and be the subject of specific recommendations to the board as well.

I don't know if we need a motion for any of this. I'm not sure that we do. And if I'm venting a little frustration, I suspect that I'm not alone in what I'm feeling here. But I do think we need to be presented with I think analyses that are complete and that contain such advice as can be provided and an array of options to the board for our next meeting.

And I may be prepared to make a motion at that time, whether we have it or not, that we proceed to take action to reduce fishing mortality. This resource is in

freefall. We ought to be doing what we can do.

CHAIRMAN DANIEL: Well, with that said, Gordon, in concert with what I said, I think we've got -- if everyone agrees that direction to the technical committee, I would say that without objection, we'll move forward in that vein, if that suits the board. I had Ernie, patiently.

MR. ERNEST BOWDEN: You had Ernie but he's far from patient. After three days, I've said one word, no. Some of you know that I chaired the Weakfish Advisory Panel for a number of years, and I sat on the management board as a non-voting member.

I think emergency regulation is called for, but I think it was called for yesterday morning. This commission has shown a strong willingness to sacrifice a number of fish stocks to keep striped bass at an abnormally high number.

Mother Nature is going to rectify this. It has already started the process. We probably wasted a valuable resource. I think Gordon's idea was certainly the right way to go, but I think you need to look at a lot more than just manmade fishing mortality rates in that there's a strong correlation between menhaden, striped bass, weakfish.

When I go striped bass fishing in the fall for large fish, I don't look for anchovies. I don't look for spot. Ones that are too small for, 6-7-8-inch fish, that's where you find the large weakfish.

I'll be more than glad to take anybody on this board that doesn't believe that fishing with me in the fall. I mean, you know, it's the way it is. You know, sometimes you're the bug; sometimes you're the windshield.

Back in the early '90s, the weakfish were the windshield. Now they're the bug. Things have changed around. I think that's the direction we need to look in. And along his lines, we need to look at all sources of mortality, and we may have to suggest something to another management board. Thank you.

CHAIRMAN DANIEL: Thank you, Ernie. Jim.

MR. UPHOFF: As a point of clarification for what you want the technical committee to look at as far as what needs to be done, what is on the table here? Is it just managing the weakfish fishery or is it

alternative measures with other species? I mean, what's on limits; what's off limits? I mean, what can you guys stomach as far as trying to make recommendations?

CHAIRMAN DANIEL: Jaime.

DR. GEIGER: Mr. Chairman, I think our obligation is to manage the species. Multi-species management is a fine concept. I wish we were there today; we're not. Let's deal with what we have to work with and move forward. Thank you.

CHAIRMAN DANIEL: Roy.

MR. MILLER: Just a follow up to Jim's comment. I think, Jim -- I'm going to direct a question or a suggestion to Louis in a second -- but I think, Jim, that if the technical committee and the stock assessment committee feels that management of other species, related species would be beneficial, then they should make that suggestion and then we can mull it over.

I'm not going to presuppose what those suggestions might be. But my question to you, Louis, as chair, is it's no longer clear to me exactly what the charge to the technical committee is. Could you or could someone articulate what that charge is.

CHAIRMAN DANIEL: I think, from what I said and what Gordon said, was first we need to address the concerns and issues from the SARC report. Then there needs to be -- they said that there needed to be some -- there was some uncertainty in the impact of fishing mortality to this decline, that it could be fishing related; and that some of the ADAPT configurations suggested that F could be the cause of the decline; whereas, right now I think the preponderance of evidence is more towards an M type decline.

So what I understand to be the charge is to address these data deficiencies and make recommendations as to how we resolve them or fix them and determine whether or not some of these ADAPT iterations are actually F related and how they relate -- you know, and how we would deal with those reductions in F in a subsequent amendment to the plan. Yes, sir.

MR. MILLER: I see it a little more simply. What I would like to know is should we reduce F; and if so, how?

CHAIRMAN DANIEL: And I think in order to answer that question, should we reduce F, we

need to know if F is the problem. That's at least the impression that I've gotten from the discussions around the table.

They need to come up with that answer first. And then once they've come up with that answer, answer your question, do we need to reduce F; and if so, by how much and then how do we do it. Jim.

MR. UPHOFF: I have a comment about multi-species management. Whether you manage this species only in a single-species context or not, in fact you're accumulated actions individually through single-species assessments and management are multi-species management.

You know, there is the possibility of impact in your single-species management that is essentially collateral damage to other species. You don't have to try and address it directly but I'm -- well, I'll just leave it at that, just a comment.

CHAIRMAN DANIEL: Roy, was that a satisfactory answer to your charge to me?

MR. MILLER: If you agree that we should -- after they've examined the concerns and issues addressed by the SARC and made recommendations on monitoring and data deficiencies, then if we can ask them the question does F need to be reduced and if so how, then I'm satisfied.

CHAIRMAN DANIEL: And that's satisfactory with the board. I believe I'm seeing nods around the table so that is the approach we will take. Jim.

MR. UPHOFF: Well, okay, there is, again, two schedules that you're going to end up with if it's a review of what the SARC requested -- in other words, we're going back and reviewing the data, more or less, the types of estimators we're using, how we're conducting sampling and so on, that's a much longer process than I think than next May's meeting. That is a long-term project, a long-term assessment need. Trying to address what F's impact might be based on what we have is doable.

CHAIRMAN DANIEL: Roy.

MR. MILLER: Just to follow up on that, I didn't mean what you said, Jim. What I meant was the SARC had issues and concerns with the data. What I was looking to the technical committee for is the first item of business we discussed today; namely, what information do we need to gather and who



should be gathering it?

You know, if it turns out we need better catch at age data for the commercial fishery and if four or five states need to supply that, then that's the kind of advice we're looking for from the technical committee. That would be a refinement, if you will, of Amendment 4. But it was not what you said that was my intention. Thank you.

MR. UPHOFF: All right, I appreciate that, because, like I say, when people are talking about what the SARC review asked, you know, it's a complete data review. And this is something different, which is really part of the charge that you're giving us to look at the sampling requirements in Amendment 4. So it's not, you know, not so bad.

MR. KAHN: I think it's going to take a long time to really fully carry out all those recommendations from the SARC; however, we're quite capable of responding to them for the board and, you know, each point they made and say we have -- in fact, we have responded and taken some of their suggestions already in the further work we did. We can explain that and explain what will take a longer time and that type of thing, if that would be helpful.

CHAIRMAN DANIEL: Anybody else? Vince.

EXECUTIVE DIRECTOR O'SHEA: Mr. Chairman, in earlier discussions there was a question about whether the relevance or the impact of increasing natural mortality had been peer reviewed.

So, the situation we had is the work of the stock assessment committee went to SARC for advice on the dilemma that they were in. Now we're agreeing for them to do some more work and come back to us in May, and it seems to me one of the other questions then is what's the expectation of the board in terms of that product?

Are we going to come back in May and say has it been peer reviewed -- that advice/product has been peer reviewed, and is there an expectation that that needs to get done before the board will take action; or, does the board want that to be done between now and May? I think that's another issue that you need to deal with.

CHAIRMAN DANIEL: Well, personally I believe that what we've come up with, Roy and Gordon and myself, that sort of encompasses what

we need in order to make decisions in April. I don't think we're going to get a successful peer review of the multi-species approach by April.

I'm not sure we're going to ever get one. I mean, based on the discussions that the assessment folks had this morning on the menhaden approach, to determine changes in M they need to do a multi-species VPA.

And they said that was the only way that you could do that, make that assessment. I don't know whether that's correct or not, but I don't think we need to be able to say striped bass are eating all the weakfish before we make a management decision on dealing with the problem of a reduced stock.

So, no, I do not anticipate that we would have anything additional peer reviewed other than just a summary of the information that we've requested thus far.

EXECUTIVE DIRECTOR O'SHEA: Well, I guess the question is then why did we take this thing to peer review -- why did we try and take it to peer review in the first place? I think the answer is isn't that our process, so you guys get a stock assessment done and then you get a peer review. Based on that you take action.

So you didn't get a peer-reviewed stock assessment. We don't have a peer-reviewed stock assessment. I'm not trying to argue one way or the other. I'm just posing the question, is a sort of corrected paper that's then submitted -- that then comes to the board in May, is that going to be enough for you all to take action or is the issue of that peer review going to be another hangup?

And if it is, then maybe we ought to think about a strategy to deal with that between now and May unless you want to -- then you're into August, if you don't do it.

CHAIRMAN DANIEL: Well, the way I interpret the SARC report is that until we get a thorough review of the data issues, there is no need to do another assessment report. So, in order to do that, the technical committee has told us two years, probably, work plan in order to do that, so I don't forecast a peer-reviewed stock assessment available before two years from now. Des.

MR. KAHN: One thing you have to realize, and it's probably not very clear, is that since the SARC review we had an additional analysis, which is

really almost a complete assessment unto itself, that does not depend on many of the data sources they were discussing, which was primarily the trawl survey indices.

We developed another approach, primarily Vic Crecco's approach, which is where the surplus production comes from and so forth, and it was based on a different take. It wasn't depending on surveys. So, therefore, we have an assessment that is available and I think it should be peer reviewed.

It's a little different. I mean, we've still done the things we did before, but we've got additional things that took a different approach and certainly is a candidate for peer review, in my view.

CHAIRMAN DANIEL: Let me get Eric first and then we'll go to you, Jim.

MR. ERIC SMITH: I'm hearing three things, depending on who speaks, that all seem like they maybe need to be done, and I just want to list them and see if I've captured this whole debate accurately.

The technical committee would like a little bit more time to evaluate their recent assessment. They hit our deadline. This most recent deadline, they hit it. They've got all this work. They've reflected on it a little. They need to reflect on it a little bit more. So that's one need.

It would be very nice to get a peer review of this assessment by the May meeting, if possible, not a multi-species assessment, just the work that has been done as of February 1<sup>st</sup>. So that's a second need, but that's still a very short horizon. That's three or four months. That may not be doable, but that would be desirable.

And the third thing is I've heard different people say we need a plan development team to evaluate the findings of this assessment and provide the management board with recommendations at the May meeting. This is a variable.

Now the way I hear it is we want recommendations to enhance the prospect for stock recovery; or, depending on how you look at it, reversing the stock decline. That's the role of the PDT to work with the technical committee, understand their findings, and then say from the manager's point of view here are the five things we'd do.

Maybe one of them is end pollution, and there is no

chance of doing that. And maybe another one is reduce fishing mortality even though we're not sure it will do any good, but maybe it will, and it's one of the things we can control.

So you get your list of five or six things, and at the May meeting we try and make a board decision to start an addendum, do an emergency action, decide all is lost and just let the fishery trickle on as a bycatch until M goes down, if that's the culprit, and the stock starts to respond on its own.

But it seems like if we do those three things; and in fact even if we can't get that peer review done, that would be unfortunate, but if the timing is off, even if we got the other two things, we'd be a lot better off in May to make a decision as a board than we are trying to decide what to do now.

CHAIRMAN DANIEL: I believe that's a good synopsis. David.

DR. PIERCE: Yes, I agree, but I would think that one eliminates the third one, actually, would relate to our getting some advice from the group as to prospects for getting up to the SSB threshold, because that's really what we're below right now. How do we get back up to that SSB threshold if indeed we can? I'll conclude by saying it's just a darned good thing we're not obliged to live by the SFA on this one.

CHAIRMAN DANIEL: No kidding. Anything further? Any further comments? Everyone clear on the charges? Everybody looks whipped. Anne

MS. LANGE: I guess going back to what Jaime has said earlier, my understanding is this is strictly looking at the single species. We can identify that there are other natural mortality, but we're not going to be spending time at this point looking at multi-species, that we're really not at the point of doing, right?

I mean, the technical committee has a pretty big charge looking at just the single-species implications without spending time on multi-species, aside from potentially identifying that it is an issue that is impacting M.

CHAIRMAN DANIEL: Yes. Anything else related to this issue? Bruce.

MR. FREEMAN: Just to avoid any confusion, I suggest that you or someone summarize

these actions, distribute them with the motions.

CHAIRMAN DANIEL: We will do that. If there is nothing further on this subject, I'd like to thank Des and Jim for all their hard work and the technical committee and stock assessment subcommittees as well. Bill.

MR. ADLER: Are we on another subject?

CHAIRMAN DANIEL: We're getting there.

#### **ADVISORY PANEL NOMINATION**

MR. ADLER: Under other business here, Tina Berger had sent out an advisory panel nomination.

CHAIRMAN DANIEL: That's where I was headed.

**MR. ADLER: Okay, well, I'll make the motion to accept William Mandulak from Raleigh, North Carolina, and add him on to the advisory panel.**

CHAIRMAN DANIEL: Thank you. Second by Pat Augustine. Mr. Mandulak will be replacing Wayne Lee, who we tragically lost a year or so ago.

MR. AUGUSTINE: Mr. Chairman, no one can replace Mr. Lee.

CHAIRMAN DANIEL: No, that's for sure. There absolutely isn't anybody who could. Any objection to adding Mr. Mandulak to our advisory panel? Seeing none, thank you, Bill. I appreciate you doing that. The motion carries. Any other business to come before the Weakfish Management Board?

If not, motion to adjourn. So moved. We're adjourned. Thank you very much.

(Whereupon, the meeting was adjourned at 5:25 o'clock p.m., February 9, 2005.)

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