

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

**October 25, 2006
Atlantic Beach, NC**

Approved January 30, 2007

ATTENDANCE

Board Members

Terry Stockwell, ME DMR
Pat White, ME Gov. Apte. (Vice Chair)
John Nelson, NH F&G
G. Ritchie White, NH Gov. Apte.
Rep. Dennis Abbott, NH Leg. Apte.
Paul Diodati, MA DMF
Vito Calomo, MA, proxy for Rep. Anthony J. Verga
William Adler, MA Gov. Apte.
Mark Gibson, RI DFW
Everett Petronio, Jr. RI Gov. Apte.
Eric Smith, CT DEP
Lance Stewart, CT Gov. Apte.
Steve Heins, NY DEC
Pat Augustine, NY Gov. Apte.
Peter Himchak, NJ DF&W
Erling Berg, NJ Gov. Apte.
Jeff C. Tinsman, DE Div F&W
Timothy Targett, DE Gov. Apte.
Bernie Pankowski, DE, proxy for Sen Robert

Venables
Howard King, MD DNR
Russell Dize, MD, proxy for Sen. Richard Colburn
Bruno Vasta, MD Gov. Apte.
A.C. Carpenter, PRFC (Chair)
Jack Travelstead, VMRC
Niels Moore, VA, proxy for Sen. John Chichester
Catherine Davenport, VA Gov. Apte.
Preston Pate, NC DMF
Jimmy Johnson, NC, proxy for Rep. William
Wainwright
Robert Boyles, SC Leg. Apte.
John Frampton, SC DNR
Dr. Malcolm Rhodes, SC Gov. Apte.
Spud Woodward, GA CRD
Luiz Barbieri, FL FWCC
April Price, FL Gov. Apte.
Steve Meyers, NOAA Fisheries
Bill Archambault, USFWS

Ex-Officio Members

Behzad Mahmoudi, TC Chair

William Windley, AP Chair

Staff

Brad Spear
Bob Beal

Vince O'Shea
Toni Kerns

Guests

Jason McNamee
James Price
Doug Grout
Amy Kenney
Gordon Colvin
Roy Miller
Tom McCloy
Ben Landry
Shaun Gehan
Johnny Tillett
Toby Gascon
Sean McKeon
Jeff Kaelin
John Witzig

Bennie Williams
Tom Meyer
Wilson Laney
Rob O'Reilly
Dick Brame
Ken Hinman
Bill Goldsborough
Alexei Sharov
Thomas Lewis
Billy Farmer
Matt Cieri
Nicole Mihnovets
Kelly Place

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

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Move to adopt the provisions of Addendum III to Amendment 1 to include option two under issue one and option two under issue two.

Motion made by Mr. Travelstead, second by Mr. Meyers (Page 15). Motion carries (Page 16).

Motion to amend to split the question.

Motion made by Mr. Himchak; second by Mr. Tinsman (Page 15). Motion fails (Page 15).

Move to adopt Addendum III with provisions approved today.

Motion made by Mr. Adler, second by Mr. Augustine (Page 18). Motion carries by acclamation (Page 18).

**ATLANTIC STATES MARINE FISHERIES
COMMISSION**

65TH ANNUAL MEETING

**ATLANTIC MENHADEN MANAGEMENT
BOARD**

**Sheraton Atlantic Beach
Atlantic Beach, North Carolina**

October 25, 2006

The meeting of the Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Fear/Outlook/Atlantic Room of the Sheraton Atlantic Beach, Atlantic Beach, North Carolina, on Wednesday, October 25, 2006, and was called to order at 3:04 o'clock, p.m., by Chairman A.C. Carpenter.

BOARD CONSENT

CHAIRMAN A.C. CARPENTER: Good afternoon, ladies and gentlemen. We are considerably late getting started and we apologize for that but there was some very important business that needed to get done this morning and I'm not sure that we did but that's beside of the fact.

This is the Menhaden Management Board. Welcome to everybody. The first item on the agenda -- and this agenda was distributed in your packets and there are copies on the back table for anybody that needs one - - the first item is consideration of the agenda.

Other than adjusting the times we are going to try to make up as much time as we can for the benefit of the Weakfish Board that follows us this afternoon so that we can all get to the festivities this evening.

Are there any adjustments to the agenda? I will note one that under other business Jim Price has some information that he would like to pass along to the

board and I have told him that we'll set aside some time there.

I see that my vice chairman is here so that we can now begin. Proceedings from the August 2006 meeting, they were distributed in draft form. Are there any objections or corrections to that? Seeing none, then **the agenda and the proceedings from the August 16th meeting will be dispensed with and approved as presented.**

We have an item that's a standard item, public comment, and we would be willing to take any public comment for items that are not specific to the agenda. We will entertain public comment later.

Seeing no public comment we will move on then to Dr. Mahmoudi's technical committee report and stock assessment report. And doctor, are you ready to go?

DR. BEHZAD MAHMOUDI: Yes.

CHAIRMAN CARPENTER: Thank you.

TECHNICAL COMMITTEE REPORT

DR. MAHMOUDI: Thank you, Mr. Chairman. I'm going to present the basically summary of our discussion of our technical committee that was held last month, in August and covering -- next slide, please -- covering a suite of issues.

We spent a considerable amount of time reviewing the 2006 stock assessment. And so Brad's first technical committee meeting on menhaden was a busy one as you can see. We reviewed the LIDAR project, discussed and made recommendations regarding industry roles in cooperative research, discussed Chesapeake Bay harvest cap.

We reviewed the striped bass diet study presented by Mr. Price, discussed the TC research recommendation to the board, discussed multispecies issues in response to the Policy Board, and discussed state fisheries sampling target.

For today I'm going to spend most of my time on presenting to you the result of the stock assessment, 2006 stock assessment and a little bit less time on this other issue. The 2006 stock assessment was an update to the 2003 peer review assessment.

And the stock assessment subcommittee met in June and put together this stock assessment. The modeling framework basically was based on forward-project and catch at age model used in the 2003 peer review assessment.

And the subcommittee decided not to deviate much from that primary framework. However, we developed a base-run model and here I'm just summarizing the base-run configuration. So in this 2006 assessment we updated bait and reduction landing, including 2003 to 2005 data.

We included five state seine juvenile abundance indices combined into the single coastwide index. And then that updated for 2003 through 2005 with just a slight modification. We improved Potomac River poundnet index based on days fished rather than number of licenses.

We included a new vector of age specific natural mortality derived from the peer review multispecies VPA, scaled to historical tagging estimate for all these fish. And we used logistic selectivity function for reduction fishery and double logistic for the bait fishery.

The life history relationship fecundity/maturity were identical to previous assessment. And the model used basically Ricker spawner-recruit relationship to initiate the modeling effort. We also conducted a series of sensitivity runs and we divided into sensitivity into input data.

We looked at the bait landings not using linear interpolated landings for 1993-1997. We used coastwide juvenile index adding in new seine index developed for New Jersey. And we ran a sensitivity run using Potomac River CPUE index using the old unit of effort, number of licenses, just to see how the

model, basically sensitivity to these various input parameters, input data.

We also looked at the sensitivity to model configuration. For that the age-specific selectivity was corrected for potential shift in selectivity. We used three period, time periods, 1955 to 1981, used a flat-top selectivity, 1982 to 1993, have model calculate annual selectivity and for 1994 to 2005 a dome shape-type selectivity.

We also conducted a retrospective analysis to look for the retrospective bias. Just quickly take you to looking at the catch time series. In this graph you are seeing the reduction catch time series for reduction purse seine fishery for 1940 to 2005 and bait fishery for 1985 to 2005.

The take-home here is you have seen this graph many times before. In the past four or five years catch has continued to go down from 2001 to 2005. There has been a slight increase in the bait landings. Next graph.

There you can see bait landings has fluctuated around 35,000 ton with increase in landings in recent years in Virginia. Next important data input to the model is indices. We used two separate indices, juvenile indices which are the coastwide aggregate from five different time series and adult poundnet data.

Again, the take-home from this time series is the last, you know the recruitment juvenile indices declining in recent years but has reached some plateau in recent years fluctuating a little bit. But the other point is looking at the 2005 index that has gone up.

For adult indices we used the CPUE and the poundnet survey for days fished rather than number of the licenses. And as you can see in recent years that in blue has, those indices has declined in compared to if you were using the license, the actual CPUE has gone up in recent years. Next, please.

I'm going to take you to a series of graphs showing you the model fit to observed data. The first graph is model fit to reduction landing. It is almost a perfect fit. And the second graph, bottom line, is the model

fit to bait fish landing. And that is also a fairly nice fit. Next.

The model fit to juvenile indexes indices, again, is a good fit. Not so good fit for adult index. Next, please. This is the model fit to age composition of reduction fishery just as an example that the model is trying to fit the age composition of the catch fairly well in this modeling exercise. Next.

Taking you to showing the model result, and we start with looking at the population stock size and using population fecundity for a proxy for a stock size. You can see the stock size was at high level during the '50s and '60s, declining in mid-60s to early-70s, start going up during the '70s and '80s and fairly constant level during the last ten years.

Going back and looking at the fishing mortality rate, fishing mortality rate was high during 1960s and dropped in early '70s, stayed pretty much at 1.2-1.3 levels during the '70s and '80s and declining in the last ten years, basically declining pattern.

We reached a lowest level of fishing mortality in 2005 in this time series of approximately about .5. Looking at the recruitment to Age Zero model pretty much follows the pattern we have seen in juvenile indices, declining during the '70s and '80s and '90s and reaching some plateau level in the last ten years. Next, please.

So as I mentioned, we conducted a series of sensitivity runs and comparison of this updated assessment to the 1990 to 2003 peer review assessment shows a very similar pattern. The points are basically on top of each other so there hasn't been any significant change from this run compared to 2000 peer review except the fact that fishing mortality has continued to go down in the last two-three years since that assessment.

The 2006 assessment also shows not much deviation in the final result to all the sensitivity runs. So the model was pretty much insensitive to varying all those input parameters and model configuration in terms of selectivity. Next.

Next I'm going to summarize for you the, the TC evaluation and the stock assessment result in terms of evaluation of current status. One way we can do that is in looking at the 2005 estimates and compare them to historical performance which is shown in this table.

The first column you receive current year value in 2005 for fishing mortality rate of Age 2-plus, population fecundity in billions, and recruit to Age Zero. So in 2005 the fishing mortality was about .5.

And that is lower than 25 percentile of historical performance. It ranged from .83 to 1.25 and 2005 was lower than any other previous fishing mortality level. The population fecundity also was in the 75 percent, between 50th and 75th percentile so no problem there.

Recruit to Age Zero, however, was about 8.8 billion lower than 25 percentile historical performance. And that basically raised the concern for us at the technical committee level. So that's one point to take from this. But other indexes in terms of fishing mortality and population fecundity, 2005 show a healthy level.

We can also evaluate the current stock levels and compare them to biological reference points. If I just want to, I mean you are all familiar with what we went through with the Amendment 1 and setting the, basically the benchmark.

The only thing we have done a little differently here is because the growth and fecundity at age vary annually benchmark will also vary annually. That's an important point.

And so for us to provide some consistency in presenting historical pattern we recommend using the ratio of F current to our benchmark which is in this case Fmed of F threshold. If that was about one then overfishing was occurring.

And for population fecundity if population fecundity over population fecundity at target was less than one then the stocks were overfished. So that is a little

deviation from the way that we were looking at the reference points in the past.

The result of the model is shown in this graph in respect to those biological relative benchmark I just discussed. In this graph in red you are seeing the population fecundity performance historically has been above, way above, target level or threshold level as you can see in '50s and '60s.

It went below the threshold level in '60s and the early '70s and has stayed above that level since early 1970s. And the past few years, the past five years, has stayed basically well above that threshold level.

If you look at this in terms of fishing mortality comparing fishing mortality to this reference point you will see that — and that is shown in the color black — you can see that we were over-exploiting during the '60s, most of the '60s and in late '70s and early '80s and through 1990s but has, the current F has been below the threshold level for most of the recent time period, at least since 1994 and in 2005 well below the F threshold.

And all of that can be summarized in the next graph that the 2005, in 2005 in respect to fishing mortality rate and population fecundity we are in a healthy region which is in that bottom box. And so for that respect indicating that the stock is not overfishing or not overfished.

And I can summarize that in this table. In it, what you're seeing in this table again looking at our base-run model estimates for fishing mortality, for Fmed, for F target, and 2005 current F.

In the red box you see the F of fishing mortality of .5 is below the F target which is .55 at 90 percent of that level, and below the F threshold or Fmed which is .91. All other sensitivity run was basically the same pattern.

If you want to look at it in terms of population fecundity in billions, the first row would be our target in terms of population fecundity; F 2005 was way above the F fecundity target and also above the fecundity threshold.

So in summary, the TC accepted the assessment report, including conclusion and recommendation that coastwide stock is not considered to be overfished nor overfishing is occurring. The current coastwide estimate of F is near the lowest of the time series from 1955 to 2005.

However, recent recruitment estimates are of concern because they are below the 25 percentile. Most of the concern stems from the decline in juveniles seen in Chesapeake Bay. TC has provided research recommendations in the past to better understand full recruitment in Chesapeake Bay and several project are going.

We believe we just have to wait until some of the results of this research are evaluated and looked at before we get to the next step on this. The TC realized that the current stock assessment model has several limitations.

We discussed that at length in the past TC meeting. It cannot provide the stock information in geographical area smaller than coastwide. However, SSC, which is the stock assessment subcommittee, is considering spatially-explicit modeling approaches prior to the next peer review.

We'd like to really get into more detail of spatially-explicit modeling formulation and data approaches. Modeling is not capable of addressing question of multispecies interaction and environmental forcing.

We have discussed that in many occasions. And many ongoing research projects are being conducted and MSVPA- and ecosystem-based modeling are improving at this stage. That really concludes our summary for the stock assessment.

I am just going to take some short time to go over this other aspects of our discussion in the technical committee. The first one was the LIDAR project. In our meeting Alexei presented summary of the pilot LIDAR study.

The TC discussed issues raised by the Commonwealth of Virginia and Omega Protein

regarding proposed elimination of the hydro acoustic component of this study and for survey design not targeting Age Zero.

TC recommended the inclusion of either acoustic portion in the study if not in the first year but in the next year if that's possible. The TC noted that the pilot study doesn't specifically target Age Zero.

The main objective of the pilot program was to really test the equipment and data stage; however, once the pilot is completed the survey design will include Age Zero. So those are key points in our discussion with the LIDAR.

Alexei this morning just told me that he completed his pilot phase this past month. And if you have questions for Alexei he is here, I believe, so he can respond to your question regarding his research.

The next issue we discussed was the industry's role in cooperative research. The Commonwealth of Virginia and Omega Protein, as you all know, entered into an agreement that provides guidance for Omega's participation in research.

At our TC meeting we highlighted following years of cooperative research: increasing ongoing cooperation from reduction and bait fishery boats with collecting region-specific biological samples. We'd just like to intensify our biological sampling from various sectors of commercial fishery.

The TC saw utility in obtaining the spawner pilot data log from along the coast and complement the spawner pilot information with age and size composition, so it's a combination of spawner pilot and industry's boat hopefully will give us better spatial resolution in our biological information and catch information and population level information.

Obtain CDFRs from bait fishermen in areas other than Virginia. Getting good socioeconomic information was important. Obtaining gut samples from the charter boat industry and assistance from bait and poundnet fisheries in tagging type research.

The next topic we discussed in our TC was monitoring the Chesapeake Bay harvest cap. The TC raised the issue of how to monitor the harvest cap in Chesapeake Bay. Traditionally NOAA Beaufort Lab has compiled Menhaden harvest data throughout the year.

The TC proposed that it was necessary to monitor in-season because of potential ecological concern of major over-harvesting. Also in-season monitoring should be done because at some point it may have to be done to stop continued over-harvesting.

The TC concluded that a SAFIS-type approach might be the perfect reporting and monitoring tool and that's one-time data entry for Omega. It can easily be acquired by whoever is monitoring the quota. The TC requested that ACCSP become involved to determine the feasibility of such a harvest cap monitoring program.

The next topic was we reviewed the newest striped bass study presented by Mr. Price. And Mr. Price presented the result of his study done in 2006 in Chesapeake Bay.

And I believe I have one incorrect statement on that, that it showed that Age 1 menhaden made up less of the diet of female adult striped bass in 2006 than it did in 2003. And that may or may not be the case. But 12 percent of the large male striped bass stomach contained menhaden, most of which were Age 1.

The TC recommended that Mr. Price study's needs to be peer reviewed before it's used in our assessment modeling. And after it is peer reviewed it will be useful for input to the MSVPA modeling being implemented.

Mr. Price also provided the TC with his conclusion of menhaden stock assessment. He finds that there is a decline in the menhaden stock and it is caused by recruitment overfishing. And while he presented a number of statements in support of that conclusion he did not provide the group with a quantitative analysis.

Mr. Price made the point that the public sees a disconnect between ecological problem of the

Chesapeake Bay and the rosy picture of menhaden assessment. The TC agreed that a clearer message about the status of menhaden might be, might help the public better understand the menhaden issue.

We also got into the discussion of question of technical committee research recommendation to the board. We have asked Brad to basically compile all our research recommendations that the TC has made to the board.

The TC was interested in tracking recommendations over time and what progress if any has been made in implementing their recommendations. And Brad is still putting that report together and that is in progress. And we would review that in the next TC meeting.

The technical committee noted that it should conduct a new literature review of data and information published since the last review. We also recommended reviewing a new modeling approach being developed such as ecosystem-based type model or a spatially-explicit model.

And I would like to propose that that should be really high priority for our next technical committee meeting. The next review assessment is scheduled for 2009.

What we'd really like to do is start soon to look at all these new modeling approaches, especially spatially-explicit model, in advance of 2009 review so we have a pretty good understanding what this model can do and cannot do.

And the TC recommended to the board that it gives the TC a break from more question to give time for all the research results to come in and we should be able to have a time to really synthesize and use them in our modeling approach before the new set of questions are, arise.

Other issues we discussed -- and I know A.C. wants me to complete this right away, as quick as I can -- is regarding multispecies issues response to Policy Board and the bait fish fishery sampling target and

I'm here to answer any questions regarding those or others. And that's the end of my presentation.

CHAIRMAN CARPENTER: Thank you, doctor. That was a very complete report. I did sit in on the technical committee meeting and it was a well-run meeting and I take my hat off to you to keep all of those people together. And I just can't imagine you don't want more work right away. All the other technical committees ask for more work; not yours.

But, are there any, I will note that Dr. Mahmoudi does have a plane to catch this afternoon so if you have questions he is going to be available here for a few minutes. And if you look up and he's gone it's because he's got a plane to catch. But, I saw Pete Himchak's hand for a question.

MR. PETER HIMCHAK: Thank you, Mr. Chairman. I'll be very, very quick, a comment first. Dr. Mahmoudi, you talk about the recommendation to use CDFRs for bait fishermen. Is that for purse seine fishing only or for what gear?

Amendment 1 already requires as a compliance requirement that purse seine bait fisheries complete CDFRs or an alternative reporting form approved by the technical committee. So you should already have this information, at least from purse seining.

And then the other question I had, I'm sorry to interrupt you, I don't want to jump the gun on any agenda item, Mr. Chairman, but will there be a presentation -- I don't see it on the agenda -- of any monitoring of any cap during, within season or after the season today?

CHAIRMAN CARPENTER: That's not an agenda item but I believe that we do have some information that we can share with the board a little bit later this morning on or this afternoon on that issue.

DR. MAHMOUDI: Pete, regarding your first question, may I ask Joe -- is Joe around, please to respond to that, please.

MR. JOSEPH SMITH: I guess for the record Joseph Smith, National Marine Fisheries Service, Beaufort Lab. To answer Pete's first question, I think that the TC recommendation for the CDFRs which are the daily logbooks that are on the reduction boats and now on the Virginia bait boats, I think it was aimed toward the Jersey bait boats because as far as I know the Jersey boats fill out the reasonable facsimile that was in Amendment 1 but I think the TC was after more area-specific removals. And I think the Jersey documents now have very general area codes on them. I think that's the way the flavor of the TC's recommendation was aiming.

CHAIRMAN CARPENTER: Does that answer your question, Pete?

MR. HIMCHAK: I just, you know, yes when this came up through Amendment 1, you know by regulation, we had mandatory reporting. We have eight different areas in the bays and offshore for purse seine fishing so I guess they're recommending that it might have to be superseded by the CDFR. I'll have to look at the CDFR to see what we're lacking.

MR. SMITH: And there was also bait that worked almost exclusively in New England waters this year and we're not quite sure, I don't know what they're filling out when they land up in New England so we would maybe be after their boat to fill out a CDFR-like form, also.

CHAIRMAN CARPENTER: Thank you. Vito.

MR. VITO CALOMO: I enjoyed your presentation because it's very positive. It's good to hear something positive, that a stock is not overfished and overfishing is not occurring. But it's taken approximately three years of my reporting of a large body of Age Zero to 1 to the northern states from Maine to Massachusetts of millions in number of these juveniles appearing every year now for the last five years.

I will again report to you, it's growing. I don't know where they're going but it's growing. In our area of Massachusetts, particularly in some of the bays off of

Ipswich and Gloucester they have turned a blue sea black.

They are very small. They are of zero age class. And for the past five years I've reported zero age class and I don't see it, that they become twos and threes and fours. I still see zeros. I mean a tremendous amount of zeros.

My friends who fished with me back in the '70s and '80s from Maine have also given me reports of zero age class. It seems like in all the years that I flew as a spotter and fished from a purse seine vessel I have never seen, again, this phenomenon taking place in the northern states like it has.

I have seen zero age class. I have seen ones. I have never seen the masses of zeros and ones that are in the northern states like there has been the last four years. And my family is third-generation fishing menhaden purse seine for reduction and for bait.

And I'm always trying to figure out if you take in consideration even though they're not in the Chesapeake Bay like you see, you know, in abundance that what I'm seeing to the north. I mean, are we checking in that area to see? Because of taking a different path or a different area are we counting them in the juvenile? Thank you.

DR. MAHMOUDI: Somewhat, obviously I'm sure to you that our juvenile index that is going to a model is a combined index from five different indices from five different states. So some of them as much as possible is included in that, in the model.

We do not have adult and fishery-independent adult survey to supplement that sort of information. It would be great to have an adult monitoring program, also, to, as an input to our model that takes into account what you're seeing a little bit better.

MR. CALOMO: A.C., may I follow up?

CHAIRMAN CARPENTER: One follow-up.

MR. CALOMO: Thank you. Again, I will give you, I am not a scientist but I am a third-generation fisherman and my background is extensive in fishing. I compare this to Chesapeake Bay, the home of the striped bass, rock fish, whatever you want to call them.

I believe now that like the menhaden and these young menhaden that we have more striped bass to the northern than you may have in the Chesapeake Bay.

And we have more menhaden of young age class than they have in the Chesapeake Bay and that's something to do with nature or solarium or temperature or so on and so forth, feed, conditions. But things have changed and we need to look at that. Thank you.

DR. MAHMOUDI: Just quickly to follow up, the TC has recommended to initiate an adult, fishery-independent adult monitoring program for menhaden coastwide so that we can capture some of the observations that you are talking about.

MR. CALOMO: And we are now seeing -- I'm sorry, but we are now seeing age classes in five and six year olds appearing in our waters for the first time in a long time. Thank you.

CHAIRMAN CARPENTER: And, Vito, you send more of those striped bass back to the Bay and you'll have more menhaden left up there. Any other questions for Dr. Mahmoudi? Thank you very much, doctor.

I appreciate your efforts to be here today. And we will then continue with the agenda item. The next one is the summary of the public hearings that have been held on Addendum III and that's Brad. Go ahead, Brad.

ADDENDUM III COMMENT SUMMARY

MR. BRADDOCK J. SPEAR: Thank you, Mr. Chairman. I will be very brief. The information that I will be presenting to you was submitted in the meeting materials on the briefing CD about two, over two weeks ago.

There are also copies of all that information on the back table. Just a second. Okay, while that is getting up I will go through it verbally because you should have all this material in front of you.

There were three public hearings conducted on Addendum III. The first was held in Toms River, New Jersey. There were about 16 public in attendance. Four spoke in favor of status quo for Issue Number 1 which is the cap on the harvest of Atlantic menhaden in the Chesapeake Bay.

And two spoke in favor of Option Number 2 which is the 109,020 metric ton cap. Four individuals also spoke in favor of status quo for Issue Number 2 which is the annual credit for harvest underages. And two individuals spoke for Option Number 2 which is to allow the underage credit.

The second hearing was held in Heathsville, Virginia. There were about 80 public in attendance. And everyone who spoke about the addendum spoke in favor of Options 2 for both issues. And the third hearing was held in Annapolis. There were 23 in attendance. Twelve spoke in favor of maintaining status quo for both issues. And three spoke in favor of the Options Number 2.

The written summary, written comment summary, we received five letters from individuals. There was a split two and two supporting status quo and Option Number 2 for Issue Number 1. And two individuals supported status quo for Issue Number 2, one for Option Number 2.

Five organizations submitted written comment. One of those comments, one of those letters contains 328 signatures. And that letter supported Option 2 for both of the issues. One of those letters from organizations supported status quo. And three, including the one with multiple signatures, included the second options of both issues.

We received one form letter or one type of form letter during the public comment period and there were 294 of those submitted. All of those submitted the higher cap and the underage credit.

And for the e-mail comments we received nine from individuals, five of those supported status quo for Issue Number 1 and Issue Number 2. And one of those supported Option Number 2 for both issues.

Eight organizations submitted comment. All of those supported Option Number 2 for the harvest cap. One supported option, the status quo option to not allow credit for underages for Issue Number 2. And seven supported allowing credit for underages.

We received by the deadline 1,459 form e-mails. There were two different types. Of the one type we received 1,300 and that one supported status quo. And 159 of the other type were submitted supporting Option Number 2 for both issues.

That concludes the summary. I'll be happy -- I did not go into much detail. I will be happy to elaborate or go into more detail on any of the comment if you'd like.

CHAIRMAN CARPENTER: Are there any questions for Brad? Thank you for the report and all of the documentation that you have provided us in the form of public input well ahead of today's meeting. I found that very helpful. The next item on the agenda is the report from the advisory panel and Bill Windley is here. Bill, it's your time to do your report.

ADVISORY PANEL REPORT

MR. WILLIAM WINDLEY, JR.: Thank you, Mr. Chairman. Everyone will be relieved to know that this by far the shortest report I've ever given you. We used the conference call in lieu of meeting in public or in person because of the time constraints, the short period of time between this meeting and the end of the public comments.

Brad Spear was on hand from ASMFC as the Menhaden Plan Development Team coordinator. I was there as panel chair; I'm from Maryland; Dick Lysberg from Connecticut; Brian Tarbox from Maine; Melissa Dearborn from New York; Ed Cherry

from New Jersey; and Tom Ogle for South Carolina. That's a total of six panelists.

I point out now that there was no representative of the industry on the call so you might want to bear that in mind because I'm sure that has some affect on the outcome.

The meeting was opened and introductions made by Chairman Windley and the meeting was then turned over to Brad Spear who provided the panel with a brief overview of Draft Addendum III to Amendment 1 of the Menhaden Fisheries Management Plan and the associated public hearings document with the choices and options to be considered.

Initially there was general discussion of the fishery and the events that brought on the amendment and addendum process. Early discussions focused on the fact that Addendum II was passed and in effect currently and as the process to move forward with Addendum III was being executed we weren't using Addendum II.

And we realized that actually goes without saying but we did not, there was a lack of understanding as to why we did not use our measures on hand in Addendum II until Addendum III was passed.

Discussion then shifted to the issues and options in the public hearing document. Some members felt that Addendum II was appropriate. In other words, they thought we should just stay with status quo.

That being said, however, the panel recognized that there were definite advantages in adoption of Addendum III as it would assure that a bay cap would be put into place and that research into local area depletion and development of bay-specific stock assessment tools could move forward with the assistance from the, with assistance from the menhaden industry.

The advisory panel was then polled and consensus was reached on a final recommendation. It should be noted again that no industry representative was there. It is recommendation of the advisory panel to the ASMFC Menhaden Management Board that the

board move forward to approve and implement Addendum III to Amendment 1 of the Menhaden Fisheries Management Plan.

The advisory panel, however, does not support the options that allow annual credits for harvest underages. The recommendation was reached with a full consensus of all members present.

CHAIRMAN CARPENTER: Thank you very much. Are there any questions for Bill? All right, seeing none we'll move on to the next agenda item which is the selection of Amendment III options.

And you all have the packet that has the two options that are in Issue 1 as well as the two options for Issue 2. Is there anybody that wants to address that before I make a call for a motion? Pete.

MR. HIMCHAK: Mr. Chairman, I thought we were going to receive some information on how any cap would be monitored on a timely basis. Wouldn't that be appropriate now?

CHAIRMAN CARPENTER: All right, Neils, would you like to comment on that issue?

MR. NEILS MOORE: Well, we do have Toby Gascon who is the director of governmental affairs here with Omega Protein and if he likes he could comment on that.

CHAIRMAN CARPENTER: Toby, would you like to take the public mic, please? We've got one down at the end, Toby, that you can use.

MR. TOBY GASCON: Toby Gascon once again from Omega Protein. Yes, we started looking at the addendum when it first came out and we realized that reporting was going to be an issue. We have been voluntarily reporting our CDFRs for over 50 years in this fishery.

There seemed to be some literature floating around that there was some concern that we were not reporting accurately or would not be reporting

accurately so we took corrective measures to address that.

We approached NMFS about a month ago and inquired about VMS electronic real-time reporting of catch and area. NMFS welcomed that with open arms. We've looked at a couple of systems now.

We hope to have those systems installed, in place on our boats where we're almost going to get real-time catch data by area by VMS. I hope that solves the question of the reporting. I can't influence the satellites and where they say the boats are so that should handle it.

CHAIRMAN CARPENTER: I think that kind of commitment on the part of the industry is welcomed. And I do not know that in talking with Joe Smith that they are getting the data and they are able to track it.

Preliminary information at this point indicates that they're not even going to come close to the quota for 2006 and that it doesn't seem to be a problem now. So if they have this equipment on the boats for next year I think that that's an issue that's going to be taken care of.

Are there any other questions before we get started? I'll be looking now for a motion. And Jack Travelstead has his hand. I hit the wrong button. I'm sorry. I'm not used to having two buttons at the same time.

SELECTION OF ADDENDUM III OPTIONS

MR. JACK TRAVELSTEAD: Thank you, Mr. Chairman. Before I make a motion I would like to just bring the group quickly up to speed with what's going on in Virginia and let you know that Delegate Cosgrove in the Virginia General Assembly has already pre-filed a bill for the 2007 session that would incorporate the Option 2 provisions of this addendum.

Apparently the support is now there in the assembly to move this forward. Just in case some of you saw an early version of Delegate Cosgrove's bill, I'll

warn you in advance that it did not contain all of the appropriate provisions.

But immediately upon contact with him he assured us that that was a simple oversight on his part and he has proceeded to amend his own bill such that it will conform to all of the provisions that we describe as Options 2.

I am also aware of another delegate in the assembly who is also interested in submitting his own version which also will comply with the provisions of the addendum so there appears to be some competition about who can get there first now.

But I think that's good news. With that in mind, Mr. Chairman, I would like to **move that the board adopt the provisions of Addendum III and include Options 2 to the issues that are laid out in that addendum.**

MR. CALOMO: Second.

CHAIRMAN CARPENTER: Is there a second to the motion? I see Steve Meyers, Vito and a whole host of other people that wanted to second so I think we have an ample number of seconds for that. It's time for discussion of the motion. And I'm going to start with Pete.

MR. HIMCHAK: Mr. Chairman, I was wondering if it was possible that we could break down the motion to address the 109,000 and then the underage used in successive years and vote on those separately. Is there any support for that?

CHAIRMAN CARPENTER: That would require a motion to split the question and it would be up to somebody to make that motion and then get a second.

MR. HIMCHAK: Mr. Chairman, I will --

CHAIRMAN CARPENTER: I recognize Pete.

MR. HIMCHAK: I will make that motion to separate the, we vote on the cap, the actual cap

figure of 109,000 versus 106,000 and then a separate motion to vote on the allowance of underage used in succeeding years.

CHAIRMAN CARPENTER: I understand there is a motion to split the question. Do I have a second? I have a second from Delaware. Discussion on the motion to split the question. Call the question. Do you need time to caucus?

Since we're trying to make up a little bit of time I'm going to give a 15-second caucus. Is everybody ready for the vote? All those in favor of splitting the motion raise your right hand; all those opposed, a like sign; are there any abstentions or any null votes; one null from New Jersey.

DR. LUIS BARBIERI: And one abstention from Florida.

CHAIRMAN CARPENTER: And one abstention from Florida. I think the motion fails. The motion fails. We're back to the original motion and I'll recognize Pat Augustine.

MR. PATRICK AUGUSTINE: Thank you, Mr. Chairman. **I move the previous question.**

CHAIRMAN CARPENTER: The question has been called. Seeing no other urgent hands shaking in the air I will give again a 15-second -- well, wait a minute.

I do need to make an announcement here that, and remind the board that under our rules meeting-specific proxies do not vote on commission matters on final actions. So, and this would be a final action.

With that in mind I'll give a 15-second -- I'll give this one 30 seconds. We're making up pretty good time. Okay, we've had time for the caucus. The motion, do we need that read for the record?

The motion is to adopt the provisions of Addendum III to Amendment 1 to include Options 2 under Issues 1 and Option 2 under Issue 2. Motion by Travelstead; seconded by Mr. Steve Meyers.

All those in favor of the motion please raise your right hand; all those opposed, like sign; any abstentions; any null votes; one null vote. The motion carries 14 in favor and 1 null. Thank you all very much.

I know this has been a long process to get here and I do appreciate everybody's cooperation this afternoon. The, I guess the next issue that needs to be dealt with is the implementation date. And I'm going to ask Brad for some help here in coming up with a number for that.

MR. SPEAR: Staff did not have a recommendation for implementation date.

CHAIRMAN CARPENTER: What's the minimum amount of time for us to make something like this effective under the charter?

MR. ROBERT E. BEAL: The charter doesn't have a minimum standard. The standard practice for the board is to talk to the states around the table and see how much time they need to go through the process. And, you know, based on Mr. Travelstead's recent comments you know it sounds like Virginia will be able to react fairly quickly but I'm not sure of an exact date.

CHAIRMAN CARPENTER: Jack.

MR. TRAVELSTEAD: Well, I think there is a distinction between when you see new legislation adopted in Virginia and when that's effective. And the dates that are contained in the addendum as to the years the quota counts -- and I just want to bring that up.

You know it's clear to me that the addendum applies to the years 2006 to 2010. I don't think there is any disagreement on that. And in fact as you know Omega Protein has agreed to abide by the quota this year.

Now, in terms of the legislation actually being effective in Virginia, as far as meeting the first date, you know we can show you the legislation that has been pre-filed and that's our plan, basically.

But legislation adopted by the Virginia General Assembly is not effective until July 1 of 2007. So, as long as those distinctions are understood I think we're okay.

CHAIRMAN CARPENTER: Mr. Abbott.

REPRESENTATIVE DENNIS ABBOTT: Thank you, Mr. Chairman. A question for Jack, could you refresh my memory on the action that Governor King took. Was it only a recommendation or did he actually place something in executive order?

MR. TRAVELSTEAD: No, he did not. He did not make an executive order. But nonetheless Omega, as you know, has agreed to abide by the provisions this year.

REPRESENTATIVE ABBOTT: Thank you.

CHAIRMAN CARPENTER: With that in mind, is it possible to have this effective July 1st of 2007 which would be the normal time that legislation would become effective, if I'm understanding what you're saying? And we have the full commitment and cooperation of the industry on this matter.

Is there any objection to that being the effective date so that we don't get in a quandary of Virginia being out of compliance for something that they can't change? I'm looking to staff for some kind of guidance over there. Vince.

EXECUTIVE DIRECTOR JOHN V. O'SHEA: Yes, thanks, Mr. Chairman. It seemed to me also that with the advantage of the 1 July date is the board is most likely not going to meet until August so if, you know, something happens, some extraordinarily unusual thing happens there is some, it seems to me there is some bit of flexibility there.

CHAIRMAN CARPENTER: Thank you. Howard King.

MR. HOWARD KING: Just a point of clarification. If the Addendum III cap is for all intents and purposes in place this year, 2006, then the other provisions are in place as well, the carrying forward of the underage and penalty for overage?

CHAIRMAN CARPENTER: I would expect that yes all parts of Addendum III that were approved today would be effective with the same date. Ritchie.

MR. G. RITCHIE WHITE: Thank you, Mr. Chairman. Could we get confirmation from the industry that that is how they view it?

CHAIRMAN CARPENTER: Toby, would you like to comment to the commitment of the industry?

MR. GASCON: Thank you. Toby Gascon again with Omega Protein. Yes, we did reach an agreement with the Commonwealth of Virginia, with the governor. We signed a memorandum of understanding on research.

We've also reached a very strong and very firm agreement that once we reach this cap we will immediately quit fishing in the Chesapeake Bay, no questions asked.

I can calm everyone's fears right now and tell them that we're about at 56 percent of Addendum III for 2006 so I don't think we're going to have a problem this year. And I think going forward we're not going to have a problem at all. I can guarantee you that without question.

CHAIRMAN CARPENTER: Thank you very much. And -- Pete.

MR. HIMCHAK: I just have one quick question, Mr. Chairman. The electronic VTR monitoring, is that being conducted in 2006 or will that start in 2007?

CHAIRMAN CARPENTER: I'm looking to Toby. I'm guessing that's 2007. You don't have the equipment on the boats yet, is that correct?

MR. GASCON: Well, due to the fact that this issue just came up and just finally got right and then we had to look into monitoring and there is some folks out there who in spite of the fact we've been voluntarily reporting all of our catch data for 50 years still believe that there is a problem with our reporting -- and I will note, our captains get paid according to their fish catch so I don't think they're going to be low-balling any fish catch -- so the instruments will be in place for 2007 due to the fact that we have probably about three weeks left of the fishing season in the bay this year. I think once we got the people over to put the equipment on and so forth we'd be around Christmas time.

CHAIRMAN CARPENTER: Thank you. I think that answers that question. Pete.

MR. HIMCHAK: Mr. Chairman, I wasn't speaking directly to the actual landings but it's the area that concerns me. I doubt very seriously they'd under-estimate their catch but the area coding is critical, whether it's in the bay or in the ocean where there is no cap.

CHAIRMAN CARPENTER: I don't think that Virginia would accept data that was falsified. And, Jack, do you have any feel that the, what we're hearing is not the correct information? And, also, I'd like to call on Joe Smith. He is the man that has done all this data input in recent years.

MR. TRAVELSTEAD: Mr. Chairman, you know I think at some point it just comes down to you have to trust the fishermen. You know look at all of the different fisheries that we have up and down the Atlantic coast that are managed by quotas.

And we don't seem to be paying that much attention to that monitoring as we are here. And you know I can tell you that we have a great deal of trust in Omega's fishermen and believe that the data they've been providing us in the past and will continue to provide us in the future is nothing but entirely accurate.

CHAIRMAN CARPENTER: Thank you very much. Joe, do you have anything to add to that?

MR. SMITH: Just that the '06 season has been proceeding like the previous 30 years almost. We've been receiving those captain daily fishing reports from the industry since the late '70s. It was a joint state-fed industry program to put log, daily logbooks on the vessels.

And I've been proceeding this year knowing the importance of this, the removals from the bay. And I've been tracking the cap or the removals as best I can and time allows. At the end of each month I take the monthly CDFRs and tally up catches inside/outside of the bay and then adjust them a bit for actual pump-outs.

It's what we've been doing all along to estimate removals from the bay. So that's the way I've been coming up with the in-season number this year that a number of you probably were mailed that information.

I have no reason to suspect that there is any falsification in that it's nothing new. It has been, the forms are nothing new. They've been, the captains are well trained in these and they're pretty good at estimating their removals at sea, probably plus or minus 5 or 10 percent of the actual pump-outs.

So -- and the areas of fishing, the removals that I see from the CDFRs pretty much match what our full-time port agent up in Reedville tells me where the catches are coming from and where the fleet is at, for a given week.

CHAIRMAN CARPENTER: Thank you, Joe. I think we've adequately addressed those concerns. I had what I thought was consensus for a July 1st, '07 implementation date. Now all I need is a motion to adopt Addendum III as suggested with the July date. I have Bill Adler.

MR. WILLIAM A. ADLER: **Yes, I'll so move to adopt the Addendum III as with the provisions that have been approved here.**

CHAIRMAN CARPENTER: And I'm going to give Pat Augustine the privilege of seconding.

MR. AUGUSTINE: Second, Mr. Chairman.

CHAIRMAN CARPENTER: Thank you very much.

MR. JOHN I. NELSON, JR.: Call the question.

CHAIRMAN CARPENTER: Call the question. All in favor say aye; all opposed say no; any null votes or abstentions raise their hand. The motion carries. Thank you very much. The next item on our agenda is something that I had brought to you earlier.

Oh, that's the collaborative research program. Derrick Orner was supposed to be here but he's unable to be. Steve Meyers I think has a very brief update of that issue so we can proceed. Steve.

MENHADEN RESEARCH PROGRAM

MR. STEVE MEYERS: Thank you, Mr. Chairman. This will be very brief. Time has been spent mainly collecting field data and stomach contents for diet consumptions analysis. We've been building models with the data collected.

We plan to run the models this fall and winter. The most significant progress has been made on the use of LIDAR and on regional menhaden assessment projects. I have much more information here but that's the gist of it. And the next time this board meets Mr. Orner will be here with a very complete report.

CHAIRMAN CARPENTER: Thank you very much. Any questions for Steve? Last item is any other business and Jim Price had asked for a few minutes. Jim, there you are. Your handouts have been passed out and I will try to remind you that we are trying to make up as much time as we can so we appreciate your cooperation. Thank you.

OTHER BUSINESS

MR. JAMES PRICE: Okay, thank you, A.C. I'd like to start out with the reports that were passed out to you, actually you received the copies back in the last meeting but we didn't go over them.

So following the August 16th Menhaden Board meeting at Crystal City after my report titled, "Atlantic Menhaden Decline Caused by Recruitment Overfishing" was received by the board and I've reviewed the report with the Menhaden Technical Committee and I was satisfied that given the opportunity the technical committee did not challenge the accuracy of my report even though they may not agree the stock is overfished because they are committed to the modeling data.

However, the model can only provide reliable results if the estimates of natural mortality that it uses are correct and accurate. The technical committee has been unable to explain why the model's population estimates show a stock that is declined to record low levels while at the same time their fishing mortality estimates have declined to record low levels as well.

However, an explanation can be found in my recruitment overfishing report since it explains how the stock has been overfished. Since the technical committee estimates of natural mortality are not based on recent tagging and predation data, I believe their estimates of fishing mortality are wrong.

I would like to inform the board, well, before I go to the diet work in that report that was passed out to you today, the recruitment overfishing report, if you will turn to Page 6 I think there is a chart at the bottom of the page that will help explain as well as anything can why and how the stock is overfished.

And under NOAA's definition of overfishing when a stock can't replace itself, it's considered to be overfished. And if you would look at the numbers of adult menhaden available in the landings back in the '50s and look at what's available now, you can see the stock is obviously not replacing itself.

The older spawners, the most important spawners, are not being replaced. So I just want to make that point very clear. I think that shows as well as anything can what I mean by recruitment overfishing and I think that supports a lot of what I say in my report.

So, if anybody has any questions about the report, if not, I'll go on to the other report. It's called, "Effects of Atlantic Menhaden Decline on the Health and Diet of Striped Bass in the Chesapeake Bay and along the Atlantic Coast."

I would like to inform the board that the predator-prey monitoring program initiated in 2004 by the Chesapeake Bay Ecological Foundation has examined 1,554 striped bass.

A total of 872 large migratory striped bass were caught off the coast of Virginia, North Carolina and in the Chesapeake Bay and 682 mostly large resident males, adult males over 457 millimeters were caught in the Chesapeake Bay.

These studies are being conducted at the East Carolina University in Greenville, North Carolina by Dr. Anthony Overton and at the Oxford, Maryland, by the Chesapeake Bay Ecological Foundation and the Maryland Department of Natural Resources.

The striped bass are being examined to determine their diet, sex, body fat, presence of disease, length at age, and weight at age. Preliminary data supports testimony I have previously provided this board concerning insufficient forage available to older striped bass in the Chesapeake Bay.

The study conducted on striped bass caught in the Atlantic Ocean are being funded by the U.S. Fish and Wildlife Service, Maryland DNR, East Carolina University, and Chesapeake Bay Ecological Foundation.

The study on striped bass from the Chesapeake Bay is being funded by the Chesapeake Bay Ecological Foundation and Maryland DNR. Preliminary results of these striped bass studies support the findings of previous published studies and help explain where menhaden depletion is occurring.

The Chesapeake Bay Ecological Foundation's report on recruitment overfishing explains why menhaden are no longer available in sufficient numbers to support a healthy striped bass population in the bay.

Menhaden are crucial in the diet of large striped bass with no other prey capable of supporting a healthy population. The Chesapeake Bay menhaden juvenile indices continue to remain low. The menhaden population is very low.

Menhaden landings in the bay are continuing to decline. Striped bass weight at length and weight at age are very low. And recreational landings of resident males are declining, causing concern for the maintenance of the bay's resident striped bass.

Now if you would look at the report and turn to page, the first page, there are two pie charts. And that's the data that we've collected out of Oregon Inlet and some data out of Virginia Beach that shows you that striped bass are feeding mostly on Atlantic menhaden, between 82 percent of their diet in '05 and 71 percent in '06.

One rather dramatic change in their diet occurred this year when they found hardly any or the percentage of older menhaden were not available and they ate mostly Age Zero menhaden. Ninety-four percent of the biomass was Age Zeros which was kind of surprising.

But when we, of course, we realized that large numbers of adult menhaden weren't as far as south as they normally would be found -- even Omega didn't find them on their trips sound. And most of the charter boats had to go north to the Virginia line to catch their striped bass -- then we realized that they were feeding on the zeros as they were migrating down the coast which that accounted for the high percentage in their diet.

And then our samples out of Virginia found that they were feeding much more heavily on older menhaden. Ages 2 and 3 made up their entire diet in the samples we took in March. And that helps also, that confirms

what we, what was taking place in the charter industry.

And the percent of diet of menhaden was 52 percent but that study is not completely, all the data has not been analyzed and I expect some of the 24 percent unidentified samples will be menhaden. I think it's closer to 70 percent but it's only 52 percent at the present time.

Next. The study we did in the Chesapeake Bay we found that 85 percent of the diet were the same size menhaden as they were feeding on off of Virginia Beach, Age 2 and 3.

And however -- let's see -- well, the low number, though, we found of menhaden Ages 1 and 2 in the migratory striped bass stomachs in 2006 indicate these age classes maybe depleted in Maryland's portion of the Chesapeake Bay.

And that's important because we found off of Virginia the percentage of menhaden Age 2 plus found in migratory striped bass stomachs in Virginia coastal waters indicate these age classes were more available off Virginia than in Maryland's portion of the bay. So there may have been depletion occurring in Maryland but not off the coast of Virginia.

Next, if you look at the bar chart this helps explain what the migratory fish are feeding on. In Virginia you will see they ate mostly Age 2 and some Age 3. And in the Chesapeake Bay they consumed some Age 2 but mostly Age 3.

Again, the older menhaden were the more important food. But off of Oregon Inlet remember these same fish were feeding mostly on Age Zeros. So it makes a big difference as to what part of the coast and what time of the winter or spring that we're sampling they're eating on entirely different age classes of menhaden.

Then if you go, well, while there on that chart you can look at also the 421 large males we looked at in the Chesapeake. They were feeding on Age 1, 2, and 3 during the summer and fall. And no zeroes have shown up in any of these samples.

But that's not entirely unexpected. But the lack of Age 1 and 2 is of concern because very few older menhaden have shown up as well. And that's causing concern because that's the size fish that we have that are suffering from disease and starvation.

And the chart, the next page will show you only 24 percent of their diet so far has been identified as menhaden. And we don't expect that to go up much. But of course it will change this fall.

But it shows you how menhaden, the low percentage in number found in large resident striped bass stomachs indicate menhaden may be depleted in Maryland's portion of the Chesapeake Bay but during that time of year only at this point that we can say that.

And the last page in the report shows you the length weight of striped bass in 1984. And that was when the menhaden, the menhaden index was average and striped bass abundance was low. The weights were consistent and what we consider probably as close to average as you're going to be able to go back and look at.

And then since then using that as a baseline you can see in '98 the triangles, the weights come down. And the striped bass abundance was high and the menhaden index was below average. Then in 2005 we had a high index of menhaden in the Chop Tank River, the second highest in 50 years, and the weights at length went back almost to where they were in '84.

In 2006 we had a below average index. You can see the weights have dropped significantly. And it's a clear pattern where if the menhaden are more available their condition and health increases and their weight at age or weight at length increases.

And the data underneath is strictly DNR data that shows you how these same age year classes, Age 3 and 4 striped bass, have declined since the early '90s. So it's, this is, you're looking at the real problem in the Chesapeake Bay.

Without good year classes of menhaden for the smaller fish their weights change and their condition and health changes dramatically from year to year. But it can change from one river to the other. It can be different in the bay. It can be different in the river.

So to sort of sum up what we've found at least up to this point about depletion is it may be occurring in river systems or in the Chesapeake Bay or in areas along the coast. These depletions can vary from season to season and year to year.

Large migratory striped bass have the advantage. They're able to consume whatever age class menhaden available. But the striped bass in Maryland's portion of the Chesapeake Bay are limited to the menhaden available after large numbers of menhaden have been removed by the menhaden industry or limited to the successful year classes of Age Zeros. Thank you. Any questions?

CHAIRMAN CARPENTER: Thank you. Are there any questions for Jim? Comment.

EXECUTIVE DIRECTOR O'SHEA: Yes, thanks, Mr. Chairman. You know, Dr. Mahmoudi had to leave to catch a plane but he did pose a question to this board or at least a problem to this board and that was he made a bit of a joke about it but he said that the workload, what I sense was a request to ease up on the workload of our technical committee of looking at different proposals and tasking that we're getting them.

And I'm not proposing that the board decide on this this afternoon but one thought occurred to me and that might be a consideration of a standard for this board and this technical committee that appears to be in an over-taxed status, at least in the short-term, that if we are going to send different studies and documents generated by others to the technical committee to review that maybe we consider asking that they be submitted to some outside peer review or scientific publication process first so that we know that there is some scientific basis.

And I'm not addressing any particular person's proposal but just something to consider as a way to filter down the workload that the technical committee has already raised concerns to us about. Thank you, Mr. Chairman.

CHAIRMAN CARPENTER: I seem to think that that's probably a very good idea that given that this committee is working as hard as it can. Pete.

MR. HIMCHAK: Yes, Mr. Chairman, again as being on that technical committee forever, many times the technical committee gets bogged down in trying to understand proposals submitted to it, trying to track down references, and their workload is enormous as it is. And they know where they should be focused. Thank you.

CHAIRMAN CARPENTER: Thank you very much. Is there any other business to come before the board? Do I have a motion to adjourn? Pat Augustine and half a dozen others. We are adjourned.

(Whereupon, the meeting adjourned at 4:40 o'clock p.m. on Wednesday, October 25, 2006.)

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