

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

**The Westin Alexandria**  
Alexandria, Virginia  
**May 9, 2017**

**Approved August 2, 2017**

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2. **Approval of Proceedings of October 2016 by Consent** (Page 1).
3. **Move to implement a 1 million pound cap on New York's menhaden harvest under the episodic events program** (Page 27). Motion by Terry Stockwell; second by Cheri Patterson . Motion carried (Page 28).
4. **Move to accept the 2017 Fishery Management Plan Review and state compliance reports, and approve *de minimis* status for New Hampshire, Pennsylvania, South Carolina, Georgia, and Florida** (Page 33). Motion by Steve Heins; second by Cheri Patterson. Motion carried (Page 33).
5. **Motion to adjourn** by Consent (Page 33).

**ATTENDANCE**

**Board Members**

Terry Stockwell, ME, proxy for P. Keliher (AA)	Andy Shiels, PA, proxy for J. Arway (AA)
Steve Train, ME (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Sen. Joyce Maker, ME, proxy for Sen. Langley (LA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Cheri Patterson, NH, proxy for D. Grout (AA)	Roy Miller, DE (GA)
G. Ritchie White, NH (GA)	Rachel Dean, MD (GA)
Sen. David Watters, NH (LA)	Dave Blazer, MD (AA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Allison Colden, MD, proxy for Del. Stein (LA)
David Pierce, MA (AA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
Raymond Kane, MA (GA)	Michelle Duval, NC, proxy for B. Davis (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	David Bush, NC, proxy for Rep. Steinburg (LA)
Robert Ballou, RI, proxy for J. Coit (AA), Chair	W. Douglas Brady, NC (GA)
David Borden, RI (GA)	Malcolm Rhodes, SC (GA)
Sen. Craig Miner, CT (LA)	Robert Boyles, Jr., SC (AA)
Colleen Giannini, CT, proxy for M. Alexander (AA)	Patrick Geer, GA, proxy for Rep. Nimmer (LA)
Steve Heins, NY, proxy for J. Gilmore (AA)	Spud Woodward, GA (AA)
Emerson Hasbrouck, NY (GA)	Jim Estes, FL, proxy for J. McCawley (AA)
John McMurray, NY, proxy for Sen. Boyle (LA)	Rep. Thad Altman, FL (LA)
Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)	Martin Gary, PRFC
Russ Allen, NJ, proxy for L. Herrighty (AA)	Derek Orner, NMFS
Loren Lustig, PA (GA)	Sherry White, USFWS

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

**Ex-Officio Members**

Jason McNamee, Technical Committee Chair

**Staff**

Bob Beal  
Toni Kerns  
Katie Drew

Shanna Madsen  
Megan Ware

**Guests**

**(Sign-In Not Distributed to Public)**

Jeff Kaelin, Lunds Fisheries

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, May 9, 2017, and was called to order at 3:45 o'clock p.m. by Chairman Robert Ballou.

#### **CALL TO ORDER**

CHAIRMAN ROBERT BALLOU: I would like to call this meeting of the Menhaden Management Board to order. My name is Bob Ballou; I have the honor of serving as Board Chair. Before we launch into our agenda, I need to note that we have a firm 5:45 deadline for concluding our meeting; that is because the Commission is hosting an awards event that begins promptly at 6:30.

#### **APPROVAL OF AGENDA**

CHAIRMAN BALLOU: We need to be just as prompt with our agenda, so we can get through everything by 5:45. Thank you for your help with that. Item 2 on the agenda is the agenda itself. Does anyone on the Board have any recommended modifications to the agenda? Seeing none; is there any objection to approving the agenda as proposed? Seeing no objections the agenda as proposed stands approved.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN BALLOU: Item 2B are the meeting minutes from the Board's last meeting, which was held on February 1, 2017. Are there any recommended changes to the minutes? Seeing none; is there any objection to approving the minutes as proposed? Seeing none; the minutes stand approved by consent.

#### **PUBLIC COMMENT**

CHAIRMAN BALLOU: Item 3 is Public Comment.

This is an opportunity for anyone from the public who would like to comment on any issue that is not on today's agenda to do so. We rely upon a signup sheet; which I have here. There

is no one on it. Is there anyone who intended to speak but did not sign up? Now would be your opportunity; please raise your hand.

#### **CONSIDERATION OF THE HILBORN ET AL. 2017 PAPER FOR TECHNICAL REVIEW**

CHAIRMAN BALLOU: Seeing no hands; I am going to move on to the next agenda item; which is Item 4, Board Consideration of the Hilborn et al. 2017 Paper.

First I will note that in addition to the Hilborn paper the Board has also received a May 1, 2017 response to that paper from the Lenfest Forage Fish Task Force; and both documents are included in your meeting materials. Second, I will note that we have just 15 minutes set aside for this agenda item; so we are not anticipating an in-depth discussion of the documents at this point in time.

Rather, our intent today is to bring these two recently released documents with particular emphasis on the Hilborn Paper before the Board; and look to the Board for guidance on how you would like to proceed regarding their review and the potential incorporation of that review in the Amendment 3 process. Given the relevancy of the papers to the Draft Amendment, and given that they have not yet been subject to technical review by the Board's Technical Committee or the BERP Working Group, one suggestion would be for the Board to initiate a technical review via a tasking motion undertaken today; and then circle back to the issue at our next meeting with that technical review in hand. I know that Megan, our FMP coordinator and Jason McNamee to her right, have been discussing this matter. I would like to now look to either or both of them to offer their thoughts on how the Board might want to proceed on this issue. Megan.

MS. MEGAN WARE: I'll be very brief. When we received the Lenfest Forage Fish Report that was sent to the BERP for a technical review, and then the BERP came back with their review of

that paper. One option for the Board is to pursue a similar avenue for the Hilborn paper, have the BERP read that over, provide their response and review of it at the August Board meeting.

CHAIRMAN BALLOU: With that; Board thoughts on this issue. Dr. Duval.

DR. MICHELLE DUVAL: I would actually like to go ahead and request that the BERP Work Group be tasked with the review of the Hilborn et al. Paper. You know in the same lens with which they reviewed the Lenfest Forage Fish Task Force Report for us a few years ago. I just don't think like it is going to be very productive for us to engage in much of a discussion today before we get that technical review. If that has to be in the form of a motion, I am willing to do that.

CHAIRMAN BALLOU: I don't think we need a motion; unless there are any objections. I will be looking for either concurrence on that or other thoughts on the matter. Robert, you had your hand up and then it went down.

MR. ROBERT H. BOYLES, JR.: Just to concur, Mr. Chairman, thank you.

CHAIRMAN BALLOU: Dr. Pierce.

DR. DAVID PIERCE: Yes I do concur, and I would like to highlight a couple of things relative to the paper that I suspect might come up whenever technical review is done by the BERP. For example, will this fishing forage species affect their predators? The authors of this paper, all seven of them, with Ray Hilborn being the first author; I assume, highlight that they're looking at rate of change.

That is significant when we're talking about rate of change, predator versus prey, and that needs to be looked at. In addition, it would be useful for there to be some reconciliation of what Ray Hilborn says in his recent text. He is the sole

author with his wife, I believe, "Overfishing, What Everyone Needs to Know."

I've got great respect for Ray Hilborn; I read just about everything that he puts out. He has a chapter in his book; they have a chapter in their book that is basically questions and answers. One of the questions is, do forage fish need special protection? Basically the answer is, yes. I read this and I hear what he says, not too long ago.

Now I see this paper with these other co-authors; and I'm left wondering, has he changed his point of view? Has he been influenced by the other authors? What did the data really suggest to him? Again, he talks about rate of change. Again, I would like to see this review. I think it will be very useful.

CHAIRMAN BALLOU: Yes, John.

MR. JOHN G. McMURRAY: I don't have a problem with putting this in front of the Technical Committee. I think they need to take a close look at it. But to a lot of us who spend time on the water, some of the conclusions that the paper came up with seem unbelievable; particularly the idea that predators only feed on younger prey, and it uses the example of menhaden. Anybody who has spent any time in that fishery understands that aggregations of menhaden drive time and area specific bites.

Striped bass really do focus on adult menhaden. That is really just one example. I would have the Technical Committee really take a close look at those datasets, because something is amiss; the whole idea that predator abundance is not related to prey abundance, just from an on-the-water perspective, defies commonsense. I would like to see a more in-depth analysis of that. I hope you guys keep the common sense factor in mind when you do review it.

DR. DUVAL: Just to clarify, with regard to Mr. McMurray's comments. The request was to

have the BERP Workgroup review it, rather than the TC. I just wanted to clarify that.

CHAIRMAN BALLOU: Anyone else on the Board wish to comment on this issue? Yes, Emerson.

MR. EMERSON C. HASBROUCK, JR.: Yes I concur that the paper should be reviewed, and that we should have that report back to us. But I would also request that during that review special attention be given to the last part of the paper; where the authors lay out what they conclude to be key factors that need to be included, when analyzing the impacts of fishing on forage fish. They lay out five or six key items that need to be addressed and included. Also, in terms of our review, I would like some comment about how will those key factors relate to where we're going with menhaden.

CHAIRMAN BALLOU: Good input; anyone else? Yes. Alison, you're new to the Board; welcome, thank you.

DR. ALLISON COLDEN: I heard in your opening statements that there are also public comments submitted in response to the Hilborn Paper. I am just wondering if the action that we are discussing also includes sending that response. I think the authors in that public comment indicated that there would be a peer reviewed response coming out following the public comment. I was just wondering if we were also considering sending the response to the paper to the BERP and or TC as well.

CHAIRMAN BALLOU: Yes, I believe you're referring to the Lenfest Task Force that did respond. That is in your meeting materials today; so we wanted to make sure it was before the Board, and that will be part of the review undertaken. It is essentially, they provided their response now we're looking to our own BERP Working Group to provide their response. Both will be essentially before the Board in August for your review and consideration. Next I have Rob O'Reilly.

MR. ROB O'REILLY: I guess my question is not to belabor the review, but in the paper there are several references besides Pikitch et al. in 2012, Curry is mentioned fairly frequently, Smith et al. I'm just wondering when this review takes place, and I don't know the answer here. Will you also look at some of these other papers? Is that part of the process?

CHAIRMAN BALLOU: I think the recommendation before the Board is to just review the Hilborn Paper. If you wish to expand on that you're welcome to, but I think right now that is the issue. Go ahead, Rob, follow.

MR. O'REILLY: I think this may be important to look at some of these other papers as well; the underpinnings for some of the premises that are here. I don't want to make it exhaustive, but maybe just to be able to look through them would be important. Get a sense of it.

CHAIRMAN BALLOU: That could be a pretty big lift, Rob. I mean, I very much respect your recommendation here.

MR. O'REILLY: I don't mind if they don't do it. I just was bringing it up. I mean that's fine; I'll stop.

CHAIRMAN BALLOU: Emerson, and then I would like to try to wrap this up.

MR. HASBROUCK: Thank you, Mr. Chairman for a second comment. In terms of review of the Lenfest response, if they're going to go forward with a peer review publication, relative to their response, I think it would be more appropriate to wait until that publication actually comes out; because what comes out of the peer review publication may be a little bit different than what they sent us as public comment.

CHAIRMAN BALLOU: That's an excellent point, and to clarify it I may have misspoken in response to Allison's question. The Lenfest response stands on its own. It's not going to be subject to further review. What's going to be

subject to review is the Hilborn Paper and Lenfest has already responded to that.

As you say, Emerson, they may well pursue that further via peer reviewed paper; and if so we'll bring that back before the Board as well. We definitely don't want to get into the business of trying to referee all these different scientific perspectives; but given the relevancy of this Hilborn Paper in particular and of course the Lenfest response.

We just simply want to make sure they're part of the mix. I think with the benefit of a technical review by our BERP Working Group delivered for our August meeting, we should have, I think, a decent handle on this issue; and be able to hopefully engage in a more thorough discussion on it. If there is no other hands up, and I don't see any; I am inclined to move on to the next agenda item, with the understanding and concurrence of the Board that this will be moved to the BERP Working Group for a technical review and report back for our August meeting.

Thank you for a good discussion on that. With that we'll move on to Item 5, which is the BERP Working Group Progress Report. This is just a quick five-minute update on the status of the working group's efforts to develop ecosystem-based reference points for menhaden. I will turn to Shanna Madsen; our Commission's Fishery Science Coordinator for this review. Shanna, the floor is yours.

MS. SHANNA MADSEN: We're going to dive right in here to what should be a very familiar slide; because I show this to you guys every time I give you an update. Just looking at where we're at in 2017. Essentially, the BERP Work Group has a pretty full next few years coming up; to make sure that we are delivering our promise of ERPs by the 2019 timeframe.

In 2017, we've already completed one of these workshops, which I'll get into briefly on our next slide. We have two other in-person meetings

scheduled; one to review another one of our modeling approaches, and we have various calls schedule throughout the rest of the year. We have a call coming up, actually in a few weeks.

We'll again be scheduling then a call to review the Hilborn Paper as the Board has just requested. Coming up in 2018, we will start our process of having our Data Workshop. Essentially we anticipate probably having two data workshops, due to the number of modeling approaches that we are considering; and the fact that these are multispecies models.

There is going to be a lot of data coming in. We're not just going to be vetting data for one species; we'll be vetting data for all of our predator species and all the other prey species that will be input into these models. Then in 2019, we will move into our assessment workshops. Again, we probably anticipate having about two assessment workshops.

That will have to take place prior to the 2019 peer review; where we anticipate all of our models going together as a package, along with a single species BAM model for review in 2019. We'll have those results for you, hopefully in 2020. Again, I just want to remind the Board that this is kind of the first time that we're attempting to do this level of modeling; to generate these ecosystem reference points.

It is a very ambitious timeline. We are cautiously confident in our ability to get these to you in 2019. We haven't experienced any hiccups yet; we are on track. But I will continue to keep the Board apprised of the situation as we move through the next few years. Our April modeling workshop that we just had a few weeks ago was focused on our multispecies statistical catch-at-age, you guys have all heard statistical catch-at-age modeling before.

This is the multispecies form of that. This catch-at-age model is actually being developed by our very own Jason McNamee. The Committee provided Jason with some suggestions for some



modifications, some comments that they had, and from those recommendations the group will be putting together a subcommittee of people who work closely with our old MSVPA model to kind of look at some of the data inputs that we want to put into that multispecies-statistical-catch-at-age model

We were also updated on some of the outside modeling approaches that are in development; as well as heard some updates from a few of the other models that we considered in 2016. We also just held a call on April 24, so just a short time ago, with the Lenfest Forage Fish Task Force. The reason that we held this call is we wanted to ensure that the reference points that are being looked at in Amendment 3 are actually calculated and are congruent with all of the recommendations that Lenfest has in their paper.

We developed a list of questions that we distributed to the task force prior to that call; just so they understood the modeling questions that we would be looking at moving forward. We wanted to have a discussion later based off of their responses. For our near future plans, as I mentioned we're going to have a call; that will be on May 19. The group is going to review the recommendations the Task Force provided us on the previous call; and again look at some of the calculations that a few of our committee members have already been working on, just to make sure that the whole committee is onboard with the way that we've decided to move forward with these calculations.

We do anticipate that these calculated reference points will be available for Megan to place into Draft Amendment 3 for further review by the AP, I believe, later in June. These will be ready for August meeting week for the Board to look at as well. As a heads up, as I said earlier the BERP is also going to meet twice more in person this year. We're looking at a late summer in-person meeting to review a surplus production model that is in development outside of the work group.

At the end of the year the group is going to meet again in person; and that will sort of be our final decision workshop, I'm calling it, where we'll go through, we'll look at all of the modeling approaches that we've been considering over the past few years; and decide which of those will move forward into the peer review phase, as always, we will continue to keep you guys updated during our May and October meeting weeks. With that I will take any questions.

CHAIRMAN BALLOU: Questions for Shanna; Emerson.

MR. HASBROUCK: Thank you, Shanna for your presentation. I think it was your second or third slide that you had up there was relative to a recent conference call you had last week. Yes, I think it was that one, right. I'm just a little confused relative to the second bullet there.

Ensure control rules of Amendment 3 are congruent with the intention of the Lenfest Report, Pikitch et al. in 2012. Didn't either the Technical Committee or the Working Group determine that that paper was not relevant to what we are trying to do with menhaden management, menhaden ecosystem management?

MS. MADSEN: Yes, Emerson. From one of our earlier memos that we distributed to the Board after our review of the Lenfest Report, the BERP did find some issues with the paper. They did say that they believed that this would not be applicable to menhaden management. However, the Board did want to leave those reference points in Amendment 3 for consideration by the Board, as well as the public. That would be up to the Board to see how to move forward. The BERP is still working to make sure that the calculations that are done with those reference points are correctly done.

CHAIRMAN BALLOU: Emerson, do you have a follow up?

MR. HASBROUCK: Yes, thank you. Are those the only reference points that are going to be brought back to the Board; or there are other reference points that are being developed as well?

CHAIRMAN BALLOU: I'm going to let Megan take that.

MS. WARE: Hey Emerson, there are other options; and I'll be going through Draft Amendment 3, just after Shanna's finished. I'll be talking about the options that are in the document.

CHAIRMAN BALLOU: Other questions for Shanna on her update regarding the BERP Working Group? Seeing no hands; thank you, Shanna again for a great update.

### **UPDATE ON DRAFT AMENDMENT 3**

CHAIRMAN BALLOU: We'll move on to Item 6 on the agenda; which is as Megan just indicated, an update on the development of Draft Amendment 3. I'll just give a couple words of intro here, before turning things over to Megan.

As everyone is aware, the Board moved to initiate the development of the draft amendment at our last meeting in February, and the target date for bringing the document before the Board for final review and approval as a draft; before going out to public comment, will be at our next meeting in August.

As such, today's meeting constitutes an interim stage in the process of developing the document. This mid-stream status affords the Board an excellent opportunity to review the progress made to date, consider some recommendations offered by the Board's Allocation Workgroup, and consider any other recommendations that anyone on the Board may wish to offer.

That is exactly what we plan to do over the next hour or so. As we engage, keep in mind that the draft amendment remains a work in progress, and no final decisions will be made on the issues and alternatives that will go out to public comment; until our August meeting. That said, the document is certainly taking shape; thanks to the excellent work being undertaken by Megan and the Plan Development Team.

As we engage in our discussion today and move into the final three-month phase of our draft plan development, I strongly encourage everyone on the Board to continue reviewing the issues and options set forth in the document; with a view to ensuring that they are presented and bounded in a way that gives the public a clear understanding of our current management program, and the alternatives being considered.

That clarity will really help to focus public comment; which no doubt will be significant, given the issues at hand. With that I am going to be turning things over to Megan for an update. Her update will wrap with a series of questions and Work Group recommendations; which will serve as the basis for our initial review and discussion today.

After we work through those issues, I will open the floor to any other comments or recommendations from the Board regarding the draft amendment, and if time allows, and I hope it does, I would also like to provide an opportunity for public comment. My goal today, with all of these issues is to seek consensus and call for motions and votes only if there are competing views among Board members. With that Megan, the floor is yours.

MS. WARE: I will be doing an update on Draft Amendment 3 today. I do just want to underline the disclaimer that this is a working document. I fully expect changes to continue to be made up until the August Board meeting. There are really two purposes of this review. The first is to provide an opportunity for the

Board to kind of see progress thus far, and make any suggestions or modifications.

Then it's also an opportunity for the PDT to ask questions of the Board. As Bob alluded to, there are a series of questions that the PDT has for the Board; so we can get a bit more clarity moving forward. This is our timeline for Amendment 3. We are in the preparation of Draft Amendment 3 step, and we do expect that to take us to the August Board meeting. Hopefully at that point the Board will approve the document for public comment; which would make our public comment period likely from late August to potentially early October. Then the Board is scheduled to take final action in November. Just to kind of orient everyone to how Amendment 3 is organized, there are seven different chapters.

Chapter 1 is our introduction, so this states the problem that we're trying to address; and also provides a description of the resource fishery and habitat. The second chapter is our goals and objectives, so this outlines the purpose and need for action; as well as the reference points. Chapter 3 is our monitoring program.

This looks at things such as harvester reporting, as well as biological data collection. Chapter 4 is the management program. This is going to look at things such as allocation, episodic events, incidental catch, as well as any provisions that are under adaptive management. Chapter 5 is compliance, Chapter 6 is research needs, and then Chapter 7 is protected species.

Today I'm going to be focusing on Chapters 2, 3, and 4. However, if there are any comments or questions on the other chapters, I'm happy to answer those. Starting off with reference points, those are in Section 2.6.4. There are currently five different reference point options in the amendment.

Option A is our single species reference points. Then Options B, C, and D are all looking towards

the menhaden specific BERP ERPs. But those interim ERPs are what differ. In Option B, it is the interim use of our current single species reference points. In Option C, it is the interim use of the 75 percent rule of thumb.

In Option D it is interim use of the Pikitch et al. reference points, and then Option E is kind of our combo option; which is the fishing mortality target, consistent with achieving 75 percent unfished biomass, and our 40 percent threshold. As Shanna just talked about for Option C, D, and E, the BERP working group is still working on the calculations for those reference points.

But we do fully intend to have those ahead of the August Board meeting, and included in a subsequent draft of the amendment. Section 3.1 is Commercial Reporting; and I did want to highlight this section, because there are some differences that may occur, depending on the allocation method that is chosen.

We would still have reduction reporting through the Captain's Daily Fishermen reports, and if a jurisdictional quota is implemented then states could maintain at a minimum their current monitoring system. However, if jurisdictional quotas are not implemented, we need some way to monitor landings in season so that we could follow things such as a fleet quota, or a regional quota, or a sector quota.

As Amendment 3 currently reads, states would work to report through SAFIS. There are a couple of reasons why the PDT is recommending SAFIS. First it allows us to monitor landings in near-real time. This will be particularly important if there are regional, fleet, sector or seasonal quotas.

Then it also is an established coast-wide program, which fulfills state and federal reporting requirements. If there are any concerns about SAFIS, now would definitely be a time to bring that up before the Board. If there are other suggestions on how to monitor

quotas in season, the PDT is all ears. Section 4.3.1 is the TAC. We are using the same TAC setting method as Amendment 2, where the Board can set an annual or a multi-year TAC, and that can be done through the projection analysis or the ad hoc approach.

However, one of the new portions of this amendment is what we're calling the indecision clause. This is resulting from our healthy debate on the 2017 TAC. There are a couple reasons why we're putting this in. We need to specify what happens if the Board is unable to come to a decision on the TAC for a given year.

That is why we're putting this clause in. As it currently reads; if the Board is unable to approve a TAC for the subsequent fishing year by December 31, the TAC is set at one-half of the TAC from the previous year. I do want to note that this is definitely not a carrot approach; this is more of a stick approach, to getting the Board to a consensus.

The PDT did discuss keeping it at status quo, so if there is not a decision made, keeping the TAC from the previous year and moving it into the next year. However, there were a couple concerns that that might actually provide incentive to avoid a majority vote. For example, if the TAC is low and projections suggest that it could be increased; there may be some incentive to not have a majority vote to keep it low.

On the other end of the spectrum, if the TAC is high and projections suggest that there needs to be a decrease, there may be incentive to keep that TAC high, to not have to take that cut. That is how we ended up at one-half of the TAC. The PDT is all ears if you have another suggestion for what is a more appropriate level.

Moving on to Section 4.3.2, which is quota allocation. Just to orient everyone to how this is set up. There are three different tiers in this section. This is to try and accommodate the different combinations of allocation methods

and timeframes that could be used. In Tier 1 we have our disposition quota, which is the bait versus reduction quota.

We also have fleet capacity quotas, seasonal quotas, allocation based on TAC level quotas, or none of the above. In Tier 2 we have our coastwide quota, our jurisdictional quotas, a fixed minimum quota, and then regional quotas. Then in Tier 3, we have our timeframes. Just to provide an example of how this would work.

For the Board to kind of choose the current management approach, the Board would choose none of the above in Tier 1. They would choose jurisdictional quota in Tier 2, and they would choose 2009 to 2011 in Tier 3. You have to choose an option in each tier to kind of create an allocation package.

Diving into these tiers a bit more, just to provide a bit of information on these different allocation methods, so the first one is our bait versus reduction, and there are two sub-options for how you split the quota between the two sectors. Sub-option 1 is 70 percent goes to the reduction fishery, and 30 percent goes to the bait fishery.

Sub-option 2 is that the split is based on historic landings, and preliminary allocation percentages for this option can be found in Table 1 of the amendment. Next is our fleet capacity quota. We have again two sub-options here; either a two-fleet or a three-fleet approach. Then there are also sub-options which look at whether that small capacity fleet can be managed under a soft quota. Just to provide a bit more context on that soft quota approach. The small capacity fleet is still allocated a portion of the quota; however their fishery would not close if that quota is met.

The intent of this is kind of to reflect the ebb and flow of bait landings. Where in some years they might be a little bit above that quota, in some years they might be a little bit below; but

in the end it all kind of evens out. We also have seasonal quotas here, and I'm going to talk about this a little bit more; but kind of previewing a question I have for the Board is, if the Board is still interested in this option.

One of the things to consider is states have not submitted monthly landings. My sense is from some states that might be hard to get going back to 1985. If the Board would like to pursue this option, I probably will have to use ACCSP data to calculate those percentages. Then we have allocation based on a TAC level.

Under this option we have a baseline TAC of 212,500 metric tons. If the TAC is below this then we keep our current allocation method; if it is above it, then that difference is allocated to the reduction and the state bait fisheries in different percentages, where you have different sub-options there.

Next on to Tier 2, the first option is our coastwide quota. Our second option is jurisdictional quotas and percentages for those can be found in Table 7 of Amendment 3. Next we have our fixed minimum quota. In this case each state gets a fixed minimum amount of quota. We have sub-options for either 1 percent or half a percent, and again those allocation percentages can be found in Tables 8 and 9.

Then we have regional quotas, so we have three sub-options there. We have a two-region split between the Chesapeake Bay and everyone else, a three-region split between New England, the Mid-Atlantic states and the South Atlantic states, and then a four-region split between New England, the Mid-Atlantic states, the Chesapeake Bay states, and the South Atlantic.

Then finally Tier 3, these are our allocation timeframes. Just a reminder, they are 2009 - 2011, 2012-2016, 1985-2016, 1985-1995, and then a weighted allocation between 1985-1995, and 2012-2016. One thing I do want to note is

that Florida did not collect gear-specific data prior to 1993.

What this means is for some of the older timeframes we're going to have to use data from 1993 and 1994 to kind of back calculate what those gear landings are for something like a fleet capacity allocation method. Then a question that's been brought up is do historic reduction landings from states which no longer have a reduction facility count towards the allocation percentages?

This will be one of the questions that I'm hoping to get an answer from the Board today. This is what the allocation section looks like, and I'm hoping people can't actually read this; because the point is that there may be too many options in this document. What we have here is our different tiers, we have different options, we have the sub-options and then we have the sub-sub-options. I think the concern of the PDT is that this number of options may hinder effective public comment; and it may also hinder resulting board action in November. Kind of one of the themes I'm hoping to get across today is how can we hone in on the number of management alternatives in this section? Section 4.3.3 is quota transfers. Quota transfers only apply if a regional or state-based quota is chosen.

The PDT did not feel it was appropriate for transfers between either the bait and reduction sector, or different fleets. There was a request at the February Board meeting that some guidance be provided on what happens if a state receives multiple requests at the same time. Amendment 3 recommends that if a state or a region receives multiple transfer requests, their transfers are considered in the order in which they were received.

We have four management alternatives here. Option A is kind of our status quo, so quota transfers would continue as they do now. Option B is our status quo, but it tries to build in some accountability measures, so that states

aren't perpetually exceeding their quota; and then using transfers to try and address that issue.

This says if a state or region exceeds its quota by more than 5 percent in two years, it cannot receive a quota transfer in the third year. Option C is quota reconciliation; just a reminder of how this works. If the TAC is not exceeded then any state or region overages are forgiven. However, if the TAC is exceeded then any unused quota is pooled; and that is distributed to states or regions that had an overage.

Option D here again tries to build in some accountability measures. Under this option the amount of overages that is either forgiven or the amount that's distributed to states, is dependent on the number of previous years of overages. The more overages a state has had in consecutive years, the less amount of overage will be forgiven.

Section 4.3.4 is quota rollovers. The PDT has tried to tailor this so that quota rollovers will work under each allocation method. However, it is important to note that quota rollovers are not permitted if quota reconciliation from the previous slide is implemented. There are five different options for quota rollovers.

Option A is no quota rollovers, Option B is that 100 percent of unused quota can be rollover. Option C is 10 percent of total quota can be rollover. For an example, if I am a state and I have one million pounds, I could roll over 100,000 pounds of unused quota. Option D is obviously quite similar to that except 5 percent.

Then Option E is rollover of 50 percent unused quota. Another example, if I have 500,000 pounds of unused quota, I could roll over 250,000 pounds. Section 4.3.5 is incidental catch. The first thing that this section does is define a small-scale gear from a non-directed gear from a stationary multi-species gear.

I think one of the challenges with Amendment 2 has been that it is kind of unclear who can participate in the bycatch fishery. The PDT has tried to define these different gear categories, so that we can develop options that pertain to each of these categories. They are not exclusive, so some gear types do occur in multiple categories. We now have six options for incidental catch. To kind of separate them, Options A, B, and C do not include bycatch in the TAC. Options D, E, and F do include bycatch in the TAC. One of the pieces of feedback we had received from the Board was to develop options that do include bycatch in that TAC. Option A is a trip limit for non-directed gears. This would be kind of your true bycatch definition, where something like a pound net would be able to harvest menhaden after the directed fishery has been closed through a trip limit. Option B is probably closes to status quo; it is a trip limit for non-directed gears and small-scale gears; so here both pound nets and cast nets would be able to harvest.

Option C built on this by adding a cap and trigger. It sets the cap at 2 percent of the TAC, and if this cap is either exceeded by 10 percent in a given year or if it is exceeded two years in a row, then that would trigger management action. The Board would be triggered to consider ways to reduce bycatch in the menhaden fishery.

Option D is an incidental fishery set aside, so 2 percent of the TAC would be set aside for incidental catch; which occurs after the quota is met. Option E is a small-scale-fishery set aside, so this sets aside 1 percent of the TAC for small-scale gears; and these gears would harvest from this set aside throughout the year.

Then Option F is all catch is included in the TAC. Once the quota is met the fishery would close. Then 4.3.6 is episodic events. Currently as Amendment 3 is written, eligibility is for the states of Maine through New York. It is the same mandatory provisions as under

Amendment 2, so harvest is restricted to state waters.

There is a trip limit, daily trip level reporting. However, the PDT has tried to provide greater guidance on ways for states to prove a high abundance of menhaden. Things such as surveys or landings reports, fish kills, we've tried to provide a bit more guidance to states in the application process.

There are three options here, 1 percent of the TAC is set aside for the episodic events program. Option B is an increase, so 3 percent of the TAC is set aside, and Option C is 0 percent of the TAC is set aside; so that would eliminate the episodic events program. Then 4.3.7 is the Chesapeake Bay cap.

Under Option A, this is our status quo, where the cap is set at roughly 87,000 metric tons. Then we have sub-options that allow for either a portion of rollover of that cap or no rollover. Option B would set the cap at 51,000 metric tons, which is roughly the five-year average. Again, we have options that allow for a rollover of a portion of that if it is unused, or no rollover.

Then Option C would remove the cap. That is Chapters 2 through 4 of Amendment 3. Kind of getting back to one of the messages or themes of this presentation, how can we hone in on the number of allocation methods?

**REVIEW ALLOCATION WORKGROUP  
RECOMMENDATIONS**

MS. WARE: The Allocation Workgroup met to review Amendment 3, and also to provide some recommendations to the Board on how we can try and hone in on some of these options.

There were four questions that were asked of the Allocation Workgroup, and I'm going to provide their responses. The first question is there any benefits or concerns for either the two-fleet or three-fleet allocation method. The recommendation of the Allocation Workgroup is that the Board maintains the two-fleet quota

option, but removes the three-fleet option. The Allocation Workgroup felt that the two-fleet option is less complex, and still achieves the goals of the allocation method; which is to provide equitable access to the fishery for all gears, and also reduce the administrative burden on states. The second question asked of the Allocation Workgroup is should soft quotas be included as a management alternative. The Allocation Workgroup recommends that soft quotas be maintained as a management alternative for small-capacity fleets, but that the PDT further develops clear and up-front controls on this fleet.

The PDT has started to work on that. But this is something that we would continue to work on if the Board agrees with this recommendation. The third question is; is there a regional-allocation method which best reflects the menhaden fishery? The Allocation Workgroup recommends that the current regional allocation options be removed from Amendment 3, and that they be replaced with an option that establishes a regional quota for the New England states; but maintains jurisdictional quotas for the Mid-Atlantic and South Atlantic states.

Some of the members of the workgroup expressed concern that regional quotas could result in states being shut out of the fishery, due to the timing and the movement of menhaden. However, they did note the episodic nature of the New England fishery, and that may warrant a regional management approach.

Finally, the fourth question asked of the group was should historic reduction harvest from states which no longer have a reduction fishery be included in the landings used to calculate allocation percentages? The recommendation of the workgroup is that landings data prior to 2017 is not used in this amendment; 2007, my apologies. They pointed to a couple of things. They pointed to inconsistent reporting for several states prior to this date. They noted

that this timeframe only includes one active reduction plan.

Many pointed to some of the management challenges that are occurring with summer flounder. As a result, they are recommending that the current allocation timeframes be replaced with the following; 2009-2011, which is our status quo, 2013-2016, which is four years under Amendment 2, 2007-2012, which is the six years before Amendment 2, 2012 -2016, which is the five most recent years of data, and 2007-2016, which is the most recent decade of data.

One of the last slides here, this is just kind of an FYI for the Board. New York did submit a proposal to recalibrate the menhaden landings, due to inconsistent or non-existing reporting. In the proposal they compare landings for 2013-2016 to 2009-2012; to scale their historic landings. The PDT is in the process of reviewing this proposal, and they will provide a recommendation to the Board in August.

**PROVIDE GUIDANCE/ADDITIONAL INPUT TO THE PLAN DEVELOPMENT TEAM REGARDING MANAGEMENT OPTIONS**

MS. WARE: Just to leave the Board off with some questions from the PDT. Again, how can we hone in on the number of management alternatives in this document? Should the three-fleet option be removed? Should soft quotas be included as an alternative? Is the Board still interested in seasonal quotas? Should the regional allocation options be replaced with an option that creates a New England regional quota, but maintain state quotas elsewhere, and what timeframe should be used for allocation?

CHAIRMAN BALLOU: Really excellent presentation. Here is what I would like to suggest. Instead of an open question period, as we typically do after a presentation like that. Let's work through the issues that were teed up by Megan's presentation; at least initially

address any and all questions along the way. Once we get through those issues, we'll open the floor to any other suggestions, any other recommendations pertaining to anything in the document. But I just want to kind of manage the discussion here by staying as focused as we can. Issue Number 1, just drawing from this slide that Megan has left up, is the recommendation that the two-fleet option be maintained in the draft amendment, but the three-fleet option be removed. Are there any questions regarding this recommendation? Are there any thoughts regarding the working group's recommendation, which I just indicated? Dr. Pierce.

DR. PIERCE: Very well done presentation and the questions have been very succinctly listed for us. Should the three-fleet option be removed? I'm going to believe you in your presentation noted the benefits of going with the two-fleet instead of the three-fleet; but what I missed was the drawbacks. Did the group highlight any of the potential drawbacks if we go to two-fleet as opposed to three-fleet? I'm leaning towards the two-fleet, but again what are the specific drawbacks, if any?

MS. WARE: I don't think any drawbacks were discussed on the call, however you're just kind of outlining how the two-fleet versus three-fleet works. Two fleet is small versus large, so it's basically all gears separated from purse seines and pair trawls. The three-fleet option there is smaller gear, so things like cast nets, bait nets versus a medium fleet, which is something like pound nets versus the purse seines. I think it is more that the division between those different gear types.

DR. PIERCE: By going with the two-fleet as opposed to the three-fleet, we put in the mix the pound nets and cast nets. I am wrestling with that one. What is a gear that is capable of taking a "large amount of menhaden" versus a much smaller amount that one would expect to get with a cast net? I haven't yet been able to wrestle with that answer to that question. To



what extent would we disadvantage the cast net fishermen as opposed to maybe not doing that?

CHAIRMAN BALLOU: I'll leave that as a comment. Good question and I think it was answered; any other questions, comments, Terry Stockwell.

MR. TERRY STOCKWELL: I am on the same thread. Megan, can you explain to me the difference between the two and the three-fleet, where cutoff would be. In a particular issue we discussed at the last meeting it was a difference in the size of the purse seiners; and the fact that actually the fish traps, at least in Maine, could have a fairly high catch. I'm not opposed to simplifying the document by going into a two-fleet component; I just want to make sure that the fishing effort is appropriately divided.

MS. WARE: In the two-fleet option it is basically purse seiners and pair trawls versus everything else; so your Maine purse seiners would be included in that large fleet. For the three-fleet option, the split for that large fleet is for purse seiners which have a capacity over the 120,000 pounds; so your Maine purse seiners would be in the medium fleet.

MR. STOCKWELL: To that point, thank you. In that case I am strongly in support of the three-fleet approach.

CHAIRMAN BALLOU: Okay, so we have a recommendation to just go with the two-fleet and not include the three as well, but we have at least one Board member, Terry Stockwell urging that it be kept in; that three-fleet option, so discussion on the issue, Rob O'Reilly.

MR. O'REILLY: Just a question. The fleet, whether two or three is part of that whether some of the gear types in the fleet, the small-based fleet would be soft caps and some would be soft quotas and some would be hard quotas. Is that part of what is also being asked?

MS. WARE: Yes, so those two issues are very much related. A sub-option of the fleet option is that that small capacity fleet be under a soft quota; so there is an option for it not to be under the soft quota, and an option for it to be under the soft quota. What you define as a small fleet will impact which gears might be subject to a soft quota.

CHAIRMAN BALLOU: I was hoping to reach consensus, and if we don't we can take a vote or we can just roll with what we've got. Again, the idea here is to try and give the PDT as much guidance as possible as they continue their work on this document; which will come back before the Board in August.

These issues could very well be brought back in August for further discussion, but at this point it is sort of an interim check; and this is one issue, and I'm looking for further guidance from the Board on how you would like to proceed on this. Emerson, did you have your hand up?

MR. HASBROUCK: Yes, thank you, Mr. Chairman and thank you, Megan for your excellent presentation. You were able to synthesize all those various options quite well. In looking in the document, under Table 2, which is the two-fleet option, there are different percentages there that are based on historical catch for different time periods.

Then for the three-fleet option it is allocations yet to be calculated. There is no direct comparison there currently, and even if there were, I know these percentages are based on reported landings; but is that subject to change by the Board in August, or even further down the road in October? If we want to change what those percentages are?

MS. WARE: The percentages in Table 2 are based on historic landings. Unless there is a change in historic landings, those percentages would not change, or unless the allocation timeframes are changed. They presumably would not change. But there is not an option in

here yet that says 5 percent goes to small-fleet and 95 goes to large, and that not be based on an allocation timeframe. Did that answer your question?

MR. HASBROUCK: Yes it does, but what if we wanted to include a discussion about that; you know about having the distribution between fleets, whether it be two-fleets or three-fleets, be based on something other than historic landings over whatever time period we want to choose? Make it not based on historic landings.

MS. WARE: Yes, if the Board is interested in that that is important information for the PDT to know.

CHAIRMAN BALLOU: Let me just pick up on Emerson, your comment, because I think it's relevant to Terry's perspective; and that is right now in the document under Table 2, is a break out of what a two-capacity fleet allocation might look like; depending on the timeframe, and indeed there is a sort of hold under that for Table 3, allocations not yet calculated.

I think the challenge here is that it would be indeed a challenge to try to calculate allocations on a three-fleet basis; because now you're parsing the purse seine fleet. You're taking historically those purse seines able to harvest up to, I forget what the cut off is, 125,000 pounds; affording them an allocation in accordance with that middle fleet, medium-fleet category.

Then trying to go back and figure out how many purse seines that was capable of harvesting more than 125,000 pounds, putting them in the large fleet. I think if I'm not mistaken, and certainly anyone from the Working Group can speak up on this. That sense of trying to parse out the purse seine fleet into two different categories; based on historical timeframes, was going to be a huge challenge.

Why do it? Wouldn't it make more sense, and again I'm trying to paraphrase the Working

Group recommendation, to just have the purse seine fleet in one category; purse seine and pair trawls, and all other gear types in the other? Terry, did you want to follow on that?

MR. STOCKWELL: Yes, thank you, Mr. Chairman. We entered into the development of this amendment with the understanding we were going to completely look at the reallocation from soup to nuts. By eliminating the medium capacity fleet, you are disenfranchising a complete gear type and region to start with.

I just don't think it is right at this point. We may find further down the road that it makes sense to merge the two, but right now the large purse seine effort and the small purse seine, they're two different fisheries; as different as between a medium vessel and a haul seine. They are two different fisheries.

Putting them in the same category, particularly as we go down soft quotas, time periods, I know it is a bucket load of work, and I appreciate all the hard work that the TCs and the Working Group is doing to develop this. But you lack the perspective of a historic fishery in this Working Group, to advocate for what last year in Maine was a significant fishery. I hate to see us go through the efforts to develop an action right now, and at the very beginning exclude a fishery. I am strongly in favor, at least at this point, of maintaining the three-fleet option.

CHAIRMAN BALLOU: Thank you, fair enough. What I'm going to pose to the Board is that there is now on the floor a strong recommendation for keeping both the two-fleet and three-fleet options in the document. I would like to have anyone speak to that in opposition. Is there anyone in opposition to keeping both in the document? Please raise your hand and speak to that. David.

MR. BORDEN: I'm not in opposition, I'm just trying to get my head around the issue, and that I understand Terry's point here. What is, if I can

ask Megan a question? What portion, almost 95 percent of the allocation goes to a large capacity fleet, the way I understand it. Under the three-fleet option, what portion of the allocation goes to the medium-sized vessels?

MS. WARE: I don't know, because I haven't calculated it yet.

MR. BORDEN: Okay. As I said, I recognize the point that Terry is making, and I understand the logic. But I also, looking at this, I think it's going to pretty much complicate the document significantly if we have. One of the options would be to, instead of having a 25,000 pound trip limit per day on the small-capacity fleet to simply raise that to 125,000 pounds, so we would have two fleets, one would be a large capacity fleet, and the other would be a small capacity fleet. The small capacity fleet would have a higher trip limit. That should meet Terry's needs, and also simplify the document.

CHAIRMAN BALLOU: Duly noted. Are there other thoughts or suggestions on this issue? Emerson.

MR. HASBROUCK: Megan, I think it might be helpful sometime after this meeting, if you could send out to the Board members the summary slide that you had with the different actions under the various tiers. Because the question I have here relative to two fleets or three fleets is if we choose to just split the total allocation between the reduction fishery and the bait fishery, do we even get into a discussion about fleets? I can't recall from your summary.

CHAIRMAN BALLOU: The answer is no. Those are two different options under Tier 1. You would only be able to pick one. The Board would only be asked to pick one.

MR. HASBROUCK: Right, so if we chose the option of splitting the quota between the reduction fishery and the bait fishery, then we don't need to worry about two fleets or three fleets or four fleets or whatever.

CHAIRMAN BALLOU: Correct. I see no other hands, so I'm going to suggest, based on the discussion that has taken place today that both, two-fleet and three-fleet remain in the document for further development by the Plan Development Team. Is there any objection to that guidance moving forward?

Seeing none; we'll move on to the next issue, which is the recommendation that soft quotas be maintained as a management alternative as applied to the small-capacity fleet option. Are there questions on this issue, thoughts on the Working Group's recommendation that soft quotas be maintained? David Borden.

MR. BORDEN: Maybe two questions. One question is do all soft quotas count towards the overall TAC?

CHAIRMAN BALLOU: The answer is yes.

MR. BORDEN: Okay, so I'll pass on the second one.

CHAIRMAN BALLOU: Questions, thoughts on this issue, in particular the recommendation to keep soft quotas in the document; and again as applied to the small-capacity fleet option. Is the Board comfortable with that? Dr. Pierce.

DR. PIERCE: Yes, I'm very comfortable with that. I think it's a good concept and in light of the guidance you just provided, Mr. Chairman regarding the two-fleet and three-fleet option, it will provide for more, I wouldn't say a challenge, but it will be more informative for all of us; because the small-capacity fleet is defined in different ways, depending upon two or three fleets. That might influence our eventual decision about whether to go with the soft quota for the small-capacity fleet. I make that point, because I look at the two-fleet option and I see you know the drift gillnets and the weirs and the pound nets and the floating fish traps; and I'm thinking wouldn't that possibly result in a rather large amount of menhaden being landed? How do you justify a

soft quota for those particular gear types? If it is only 5 percent of the total landings of the commercial fishery, then I suppose it is not a big deal. Again, I support the soft cap.

CHAIRMAN BALLOU: Any further thoughts on this issue? If not, since we have concurrence on keeping it in and moving forward, and as such we will now take on Issue 3, which is the question of whether the Board remains interested in including a set of alternatives pertaining to seasonal allocation. If I'm not mistaken, the Working Group's recommendation was to strike that set of options from the document.

We're looking for questions and/or comments on that recommendation. The issue is seasonal allocations. This would be a Tier 1 option, so it would be in lieu of that reduction bait breakout, in lieu of a fleet capacity, it would be just breaking out the entire fishery into seasons; and managing it accordingly. The Working Group's thoughts on that were no, it was essentially that it does not warrant remaining in the document, so thoughts on that. Rob O'Reilly.

MR. O'REILLY: I think that Megan outlined the problem that could exist with seasonal allocation when she gave her presentation. It could be haves and have not's, depending on the movement of the fish. I think it should be removed.

CHAIRMAN BALLOU: Thank you for that, Rob, is there anyone else on the Board wish to comment on this? Is the Board comfortable with this recommendation to remove it? It would certainly help pare down the options. It would be in keeping with the intent of this discussion. David Borden.

MR. BORDEN: I agree with Rob. I think it should be removed. I think it simplifies the document.

CHAIRMAN BALLOU: Any other thoughts? Seeing none; I think we have good guidance on this one, and we'll move on to the next issue; which is the recommendation that the current regional allocation options be removed from the amendment, and replaced with an option that considers a regional quota for the New England states, Maine through New York, and jurisdictional quotas for the Mid-Atlantic and South Atlantic states. Questions on this? Discussion? All right, Eric Reid.

MR. ERIC REID: I will be opposed to a regional quota in New England. Where we are in Rhode Island, typically we would have the last shot at any fishery. The perfect example is this year where there was no episodic event available to us, unless the quota was high enough that we all had a nice piece of the pie; but I would be opposed to a regional quota in New England.

CHAIRMAN BALLOU: Would you be opposed if that were the only region that had a quota, as a way of preserving access to the fishery for the New England region?

MR. REID: I'm opposed to a regional quota in New England.

CHAIRMAN BALLOU: Other thoughts on this. Dr. Pierce.

DR. PIERCE: I'll echo it, I'll echo Eric's perspective. I definitely do not want to see regional allocation options replaced. What we're doing right now in our individual states in New England, I can speak specific to Massachusetts. We've done quite a bit to figure out how to manage our individual quota.

We may eventually have to go in a completely different direction; depending upon what the final results are, relative to this addendum. But the regional allocation definitely would put my state in particular at a great disadvantage; relative to who gets what first, depending upon the movement of the fish and the seasonality of

that movement. I would not support that regional allocation option.

CHAIRMAN BALLOU: We really have two issues that are sort of getting conflated here. One is right now the Draft Amendment under Option D, regional allocation has three sub-options. The first is a two-region split, Chesapeake Bay being one, and the rest of the coast being the other. Sub-Option 2 is a three-region split.

The first region is a New England region, the second is essentially a Mid-Atlantic and the third is a South Atlantic. The third sub-option is a four-region split; New England one, Mid-Atlantic, New York through Delaware being the second, Chesapeake Bay, Maryland through Virginia being the third, and South Atlantic being the fourth.

The question for the Board is; do you want to keep those regional allocation options, including all three sub-options in the document or not? If not, do you want to replace it with something else? I'm sort of hearing two different things. I'm hearing opposition to the regional allocation approach. I'm hearing particular opposition to a New England regional approach. I'm not sure. I'm just trying to get a clear read from the Board on how they want to proceed on this issue. Rob O'Reilly.

MR. O'REILLY: I'll just mention what the Allocation Work Group talked about concerning regions that it would break down to states within the region, trying to make sure that they didn't go over a quota; and that could be somewhat of a complication. I know that was stated on the Allocation Working Group.

CHAIRMAN BALLOU: Let me pose the question this way. Is there any opposition on the part of the Board to removing regional allocation in its entirety? I'll just stop there. Is there any opposition to that? Does the Board support removing regional allocation as a component of this amendment? Let me go to Steve Train first.

MR. STEPHEN R. TRAIN: While I can see the merit to removing it, no knowing what we're going to get for a choice in the end makes me wish we could keep it in there a little bit longer. I mean with what we landed in Maine last year, and the way things are changing; having an allocation that is greater than having Terry and Pat begging and borrowing from the other states to get quota, would be better for us now. Can we do away with regional, yes? But not knowing what we're going to get instead of it, makes me want to be able to keep the option in it for now.

CHAIRMAN BALLOU: Understood. Cheri.

MS. CHERI PATTERSON: I agree. I think we need to maintain the regional option, because these fish are moving. We are seeing more and more episodic events further north; and those need to be considered if the population continues to expand.

CHAIRMAN BALLOU: Yes, Senator Watters.

SENATOR DAVID H. WATTERS: Just a follow up on what Cheri said. It is hard to separate this from the next issue of the timeframes, kind of a question to Megan. If we are seeing a shift of the biomass towards the north because of climate, do those timeframes really adequately reflect what might be projected there from, so that whatever we do in the regions, if we have timeframes that are based on historic landings that really don't reflect where the fish are going? I think that would be difficult.

MS. WARE: Yes it's a tough question. I'm going to throw it back to the Board. I mean I think it is up to the Board to make a policy decision on the timeframes, and whether the Board is interested in using historic timeframes or pursuing the allocation workgroup's recommendation to go from 2007 forward. I mean that is the next discussion we're going to have.

CHAIRMAN BALLOU: Dr. Pierce.

DR. PIERCE: Yes, I'm very much influenced by Option C in the list of options. Jurisdiction allocation with minimum based allocations, I suspect that that option and one of those sub-options, one or two, would actually be of benefit to the state of Maine and to other states. I know it will be to the state of Maine that is the last in line, so to speak, with menhaden.

With the regional allocation that would include, what is it Connecticut through Maine that potentially would put Maine at a disadvantage; regional allocation in the interest of shortening the document and making it easy to understand, and certainly supportable by me.

Regional allocation Option D, I still think we could delete that and go with Options A, B, and C. That should do the trick, but again I'll defer to the state of Maine. If Maine's representatives really feel that Option D needs to be kept in there then I'll support that. But I really do think it's unnecessary.

CHAIRMAN BALLOU: Then again, just to remind the Board. We will be coming back to this for really a final review as a draft for public comment in August. We will have another chance at this issue. It's just to try to aid in the further development of the document, particularly with regard to the analysis of these options that we're really trying to address today. David Borden.

MR. BORDEN: Yes, Mr. Chairman, a question for you. Does this require more? If we leave it in until the next meeting, when we review more details, does it require any more work on the part of staff?

MS. WARE: It depends if we change the timeframes or not.

MR. BORDEN: It may make some sense just to leave it in and then take this up at the next meeting, and make a formal decision on it. People can think on it and so forth.

CHAIRMAN BALLOU: I think that is a really good fallback suggestion on these kinds, given the discussion we've just had. Just as a reminder, this is a Tier 2 issues, and I think as the Board becomes more fluent in the development and the nature of the amendment, the notion of first you don't even get to this issue of regional allocation until you've gone through a Tier 1 selection process.

I think what I'm urging everyone to do is sort of go back home, really try to digest this document as best you can. Think through the sequencing, if you will, of the decision making process that is going to unfold. Think about the public, in terms of trying to make sure they can be guided through the process of assessing the options in a way that is clear and straightforward.

Perhaps when we return in August there will be some clear thinking on what combinations we want to keep in, and which we might want to remove. I get the sense that maybe for many of you, you're just getting more and more familiar, but aren't at the point yet where you're ready to strike a wholesale some of these options.

That's the sense I'm getting, but if I'm wrong correct me. If there is certainly any specific recommendations to for example take out any of the specific sub-options under regional allocation. Now is the time to speak, otherwise maybe we'll just keep things together. David Blazer.

MR. DAVID BLAZER: In the spirit of cooperation, trying to trim down a little bit of the document. I think we could eliminate Sub-option 1, which divides the regional allocation for Chesapeake Bay and everybody else. I think we're supportive of eliminating that option.

CHAIRMAN BALLOU: Is there any objection to removing that so that we would be left with two sub-options, one would be a three-region split, the other would be a four-region split. We would remove, as Commissioner Blazer just

suggested, the two-region split separating out Chesapeake Bay. Is there any objection to trimming the document just a bit in that way? Seeing no objection; thank you for that suggestion and we'll convey that to the PDT, other thoughts on this issue; Rob O'Reilly.

MR. O'REILLY: Not on the region, but we had also delved into the timeframe.

CHAIRMAN BALLOU: That's next.

MR. O'REILLY: Okay. Too early to comment?

CHAIRMAN BALLOU: You might be only five seconds early, but let me just make sure we've wrapped on that. Have we wrapped on the issue of regional allocation; or does anyone have anything else? Dr. Rhodes.

DR. MALCOLM RHODES: Just one quick question. We would remove Chesapeake Bay, but we would still have the catch cap in the earlier part of the document.

CHAIRMAN BALLOU: Correct.

DR. RHODES: All right, perfect, thank you.

CHAIRMAN BALLOU: Good question, I was thinking the same thing, so if the Chesapeake Bay cap portion remains, this just has to do with this sub-option; any other discussion on this issue? Seeing none; and Rob, I'll give you first crack at this. We're up to Issue, actually the last issue if you will on the list of issues to be considered; at least from the Working Group's perspective and that is the issue of Allocation Timeframes.

The issue has two components. One is the question of whether reduction landings from states which no longer have a reduction fishery, should be included in the calculations. The other is the question of which set of timeframe options should be included in the amendment, and used to flesh out the allocation percentages for every alternative that involves jurisdictional

allocations. I just want to make sure the Board is clear.

These timeframes would be used in multiple ways throughout the document, on each and every occasion where there needs to be an allocation based on historical timeframes. You can see right now in the document in the tables that have been developed that were presented and are in your meeting materials, how things would play out with regard to the current four alternatives that are in the document.

In addition to status quo there are four alternatives in the document. You also have a Working Group recommendation to replace those with four different alternatives. I know Megan had put that slide up, but there it is right there. Right at the bottom of the slide is the focus of the discussion I would now like to undertake, and that is current timeframes versus proposed new timeframes; questions, discussion on this, I'll go to Rob O'Reilly first.

MR. O'REILLY: I'm well aware that Robert Boyles and you have hosted about maybe nine, it seems like nine Allocation Workgroup conference calls, and so we have discussed this. I think in the document that has been prepared, the Draft Amendment 3. It is pretty clear that there are some problems with the historic information; not only the lack of data back in time, but also the fact that the last factory or reduction facility other than Omega Protein, was around until about 2007. We talked about that.

We talked about the data deficiencies, and I think one of the recommendations and there are other folks on the Working Group, so if I get anything wrong let me know. But one of the ideas was there was a comment that 2013-2016, the second option was actually going to be almost a continuation of what had happened; even though it followed Amendment 2.

Certainly that was born out that the proportion of harvest after Amendment 2 is there. The 2012, the fourth item was because with Amendment 2, the Board was just short of having any final data, and it seemed like that could be included. Then of course the 2007 goes back to the fact that that is where there is only one reduction facility; and that is Omega Protein.

I would recommend, and other Working Group members can chime in, with the proposed timeframes are really more suitable. I know that it would be a struggle to try and recreate the past data. That is one reason. The second reason owes to the reduction class.

CHAIRMAN BALLOU: Just to help ensure that the discussion that ensues now is well informed. At the end of the Working Group memo, which is just a short, two-page memo in your meeting materials, is a third page, essentially. That is Table 1, and it shows the state-by-state allocation percentages for the time periods recommended by the Allocation Working Group. That would be the set of allocation timeframes on the right, on the slide that's up there now. In your Draft Amendment, I think it's Table 7. Does that sound right? Table 7 in the Draft Amendment is the percentages that correspond to the current timeframes on the left side.

You can do your compare and contrast, or however you want to look at it, by comparing those two tables that are in your meeting materials. I just want to make sure that this discussion is focused on those tables; because they bear the fruit, if you will, of how things would play out regarding the Board's decision on how to move forward. David.

MR. DAVID BUSH: Just a quick question. Just to kind of get a sense of how the regulatory process has impacted the fisheries, now understanding that these things change from state-to-state, year-to-year a lot of changes. But I guess what I'm wondering is, and the

reason why I'm asking, over the past few years with a couple of huge cuts, there are some significant cuts.

Is there any sense that that has caused any shift in any of the other fisheries, certain smaller fisheries, maybe no longer found it practical to fish during those years, and if so, we've sort of set it up to almost shape the plan and determine who's going to get the fish afterwards.

CHAIRMAN BALLOU: Is that a question or a comment? If it's a comment –

MR. BUSH: It's a question. I guess I'm looking for a sense of whether or not the recent regulatory changes have had any impacts in where these fish are landed, or if it is completely and totally just up to where the fish are?

CHAIRMAN BALLOU: I think the best way to answer that is to call your attention to Table 1, at the end of the Working Group document. That shows the percentages that would be applicable for each of the timeframes, one being the status quo timeframe, the other being that period of time since the adoption of Amendment 2, which for the first time put menhaden under quota management. Then you have some other combinations there.

I think really the best way to answer your question, David, is to just point to that table; and you can see whether there are any impacts that you can discern or not. I think that is the best way to answer that question, so I'll leave it there. Megan, did you have anything else on it? Okay. I'm trying to do my best to answer questions, and I keep forgetting I've got my expert right here to my right. Cheri.

MS. PATTERSON: Some states actually had decent fisheries or decent landing back in the late eighties early nineties, New Hampshire being one of them. I would of course be more leaning towards the current timeframe; so that



we actually can show that we did have viable landings that can be attributed, because if we go with the proposed timeframes, we have 0 percent.

CHAIRMAN BALLOU: Understood, additional thoughts on this. David Borden.

MR. BORDEN: I'm actually opposed to the proposed timeframes of the Working Group. I just remind everybody that the state of Rhode Island, under the existing allocation got 66,000 pounds. If you went back over the timeframe of 1985-2015, there are periods there when I worked for the state of Rhode Island that we landed 25 million pounds. There is an enormous difference. Part of the reason we're doing this whole addendum is because when the allocations were made, they simply excluded those long term timeframes. I would also remind everybody that when we went to public hearing, at least at two of the hearings there was almost unanimous agreement on the part of the public to include a longer timeframe. I'm opposed to taking out the long timeframe. I think it should be included for the public process.

CHAIRMAN BALLOU: Let me remind the Board that this is a two-part question. One is whether we keep the timeframes or not, and David and Cheri have just spoken in favor of supporting the current timeframes that do stretch back. The other is should reduction landings from states that no longer have reduction fisheries be included in those timeframes; those calculations or not? Again, a two-part question there, and I think we are looking for Board guidance on both issues. Dr. Pierce.

DR. PIERCE: I will reflect on your suggestion earlier on, Mr. Chairman that it is a tiered approach, and we need to focus on that as we get ready for the next meeting. With that said. I do favor the current timeframes, if for no other reason than again; it does include a longer time period.

I'll specifically reference Table 2 in the document; where consistent with what you said these timeframes will be carried through the entire document, all the different options, and that Table 2 reference is large-capacity versus small-capacity fleets. Depending upon the years you pick, the small-capacity fleet does get maybe twice what it otherwise would get. I'm influenced by Table 2, and as a consequence of that I would prefer to leave in the longer time span that includes the 1984 and later.

CHAIRMAN BALLOU: If you don't mind, I'm going to now challenge everyone on the Part 2 of that and that is which approach do you favor; a time series that includes reduction landings from states that no longer have reduction fisheries or a timeframe that essentially cuts them out? There is good historical information, as I understand it, on the purse seine fisheries. This would be for states like North Carolina and others that once had reduction fisheries, but no longer do; should those landings be included in the long time series that you're supporting, or not?

DR. PIERCE: I would not include them.

CHAIRMAN BALLOU: Thank you. I appreciate that and I would like to again ask every Board member as you comment to speak to that second part of the issue as well. Thoughts on the issue, there seems to be more support for keeping the current timeframes than replacing them, and I'm still waiting for more input on the question of whether historical reduction landings from states that no longer have reduction fisheries should be retained or not. Emerson.

MR. HASBROUCK: I have a question, and then I guess a comment or two comments. In terms of what timeframe should be used for allocation, we have current and proposed. Is that for all references in this document to timeframe? That would include again, going back to a Tier 1 choice; the allocation between the bait fishery and the reduction fishery. Okay.

In terms then of what timeframes to use, I'm not opposed to keeping the current timeframes, except that I would like to include 2013 through 2016. I don't know what the easiest way to do that is if we just change 2009 to 2012? But then that doesn't reflect, I'm going to say status quo or what the current allocation is based on. Then, in terms of your question about do we include states that used to have a reduction fishery? I would say yes, if we're going to go back to the 1950s and look at historic landings back to the 1950s when New York had a reduction fishery.

CHAIRMAN BALLOU: We're not going that far back, at least as proposed. We're only going back as 1985.

MR. HASBROUCK: I said that somewhat tongue in cheek.

CHAIRMAN BALLOU: I'm sorry; I didn't pick up on that. Robert Boyles.

MR. BOYLES: Looking for wisdom here on how to split the baby. Many of you who I have spoken to over the years about allocation, know that I favor kind of a weighted approach, because we all want what we want. I make a note that South Carolina has a history of a reduction fishery; and yet we made a policy decision many, many years ago to effectively abandon that fishery.

It is why I like the weighted allocation. There are some of us who like more contemporary timeframes, and yet some of us like a longer time series. What I look at in terms of a weighted allocation, and why I favor it, is that you weight it both equally and you split the baby that way. I'm not quite sure where we're going to go.

I'm interested in final disposition of this, of course; I hope in November, and hope we can come to some consensus on how to best address it, but it's why I think I like the

weighted allocation. You look at a long time series and you give that half, and you look at a more contemporary time series, and you give that half and you split the baby that way.

CHAIRMAN BALLOU: Robert, I'm not going to let you off the hook. Do you, in supporting that weighted allocation, which would in part rely upon the '85-'95 period, during which there were reduction fisheries in some states that no longer exist. Would you support keeping those landings in, or removing them?

MR. BOYLES: I would remove them.

CHAIRMAN BALLOU: Dr. Duval.

DR. DUVAL: Well I am going to agree and disagree with my neighbor to the south here. I also like keeping the weighted allocation in there; because I think it helps to bracket what the capacity was in different areas of the coast at different times. I think just because some states like North Carolina no longer have a reduction fishery.

Due to legislative action, it is highly unlikely that we will probably ever have a reduction fishery again. That doesn't mean that there is not the capacity there to harvest more. That is one of the reasons why I like the weighted allocation, and I would probably favor keeping those reduction landings in there. But you know that's me.

CHAIRMAN BALLOU: Terry Stockwell.

MR. STOCKWELL: I think we're all going to cherry pick what our favorite allocation is, I mean depending upon where we live and when we had our fisheries. Certainly there is from the northern perspective there is some wisdom for me to be in favor of a longer time series. I could also say a weighted allocation if they looked at this last year.

I am personally hoping we don't use timeframes at all as we move forward for the final decision. But I mean, tongue in cheek, Mr. Chairman. If

we're going to go back and looking at old rendering plants, my hometown had three of them back in the 1800s.

CHAIRMAN BALLOU: Wisdom of the Board on this one. I am trying to discern and think about all the comments that have been offered, and is there a common thread here? I would really like to get maybe another comment or two from folks who have been thinking about this; and have a recommendation for a way forward.

Again, thinking about the fact that we have status quo in four alternatives under current timeframes; which we can keep. It seems like there are more board members in support of keeping that. I frankly don't know if I've heard too many if anyone suggest replacing. Then I definitely sense a mixed feeling on the issue of whether historic reduction landings from states that no longer have reduction fisheries should be kept in or not.

Maybe a little bit more discussion on that second point in particular, with my sense anyway from my perch here that the consensus that seems to be emerging is to stay with the current timeframes on the left of that slide; but again, looking for more clarity on that second part of the question. Roy Miller.

MR. ROY W. MILLER: Speaking from the perspective of a state that once had a reduction fishery, and like Emerson, I would have to go back to the '50s and '60s. I don't feel like it's appropriate for us to consider the landings from those old reduction fisheries. That infrastructure that supported those fisheries no longer exists; the dock space, the fleets, everything. All of that is ancient history. I think it would be prudent to just eliminate these reduction fisheries that occurred before '85, and subsequent to '85.

CHAIRMAN BALLOU: Understood, thank you, Roy, I appreciate that. Robert.

MR. BOYLES: You know we made this decision to pursue ecosystem reference points, recognizing it was going to be very difficult for us to move forward. We are diligently working in that direction, and at the same time trying to grasp this apple with this question of allocation. I think it just strikes me, I'll follow up on Roy's comment and Terry's somewhat tongue in cheek comment; but it's a true statement.

I mean we have had capacity in these communities for generations. You've heard me say before, the communities are important. But I look at the same time that we are trying to move this ecosystem, this fishery forward. I think it's important that we recognize the capacity that we have now; with respect to reduction, and recognize that we've got terrific demands on bait. I would say for the purpose of keeping the orders of the day, Mr. Chairman that we keep the current timeframes but not include those historical capacities in the reduction fishery.

CHAIRMAN BALLOU: Here is my suggested way forward, because I do think that we do need to move on. If we keep the current timeframes, as I think there is pretty good consensus to do. By and large the work's already been done on the two ways of looking at those. You can go into your document after you get home and see more of what I'm referring to; if you don't know what I mean. Each option has sort of with reduction included, without reduction included.

My sense from what I'm hearing, and I think the direction that I'm inclined to offer the PDT, based on this Board discussion, is that the Board's preference is to use the current timeframes without including the reduction landings from states that no longer have reduction fisheries; but we'll keep that dataset sort of in our back pocket or off to the side, however you might want to refer to it, to be potentially brought back at our August meeting. If anyone felt so strongly that it needed to be.

But at least for the purposes of further refining the document, we would focus on just that one approach. Is there any objection to doing that from the standpoint of furthering the development of this document? No final decisions are being made right now; but it is more about giving the PDT the guidance they need, and Megan of course in her lead role here, to really further work on this. Is the Board comfortable with that approach? Is there any objection to that approach? Steve Train.

MR. TRAIN: The only thing that makes me uncomfortable is the fish were harvested; someone in the state landed the fish, and then because they chose to sell it to a reduction plant that is no longer there, we're not going to count it anymore. That doesn't make sense to me. It would have been sold somewhere else if the reduction plant wasn't there. It was landings that belong to the history of that state, and I have trouble pulling it out.

CHAIRMAN BALLOU: Do you have an objection to the approach I recommended, which is sort of well, let's put it this way, Steve. We can keep the document just as it is right now, and each option has two alternatives; one with reduction landings in, one with reduction landings out. I hear you saying that is your preference; to keep it that way. Is that what I hear?

MR. TRAIN: Yes, and the reason I spoke up is you said you were going to work forward in one direction; but keep the records of the other. I had a problem with that.

CHAIRMAN BALLOU: I'm going to try and broker this by just suggesting, because I really think it's important to kind of keep everything together as much as possible; even though I saw some heads nodding as I was trying to offer a way forward that was a more refined way. In fairness to Commissioner Train, and others who have spoken on this issue, let's keep everything in.

But let's vow to really roll up our sleeves and look at this document between now and August; in the sense of coming back at our meeting in August with a clear sense as to how you think this should go out for public comment. I think we've come a long way today in this discussion and our understanding of the issues and the options.

August is only three months away, it's not that far. I would just suggest that might be the best way forward. I sort of feel like on the one hand I should offer some leadership here, and perhaps make some calls; but on the other hand I don't want to make a call that might disadvantage or be perceived as disadvantaging certain states and certain interests. Does that sound like a better way forward, to keep it together with both options, both approaches in? I don't see too many heads nodding, I see one affirmative. This is a tough issue. I am really looking for consensus here. I don't want to put this to a vote.

In August we might put it to a vote, in fact we will. In August we're going to be voting on these issues. Maybe that's the way to really think about it. We need to really come to a resolution on these issues at our August meeting. We're kicking the can down the road a little bit here today, which is okay; because we're in mid-stream.

We don't need to make a final call on what goes out for public comment. But in August we will. Fair enough, I think we've had a good robust discussion on these issues. I'm not planning to further it anymore, unless anybody wants to. Megan, do you have any? No reactions, I didn't get any elbows or anything on that one.

I guess I'm okay with that suggestion. I think it is the best way to kind of keep this process together. Just know that August is going to be a good meeting. It's going to be a good meeting in August. We are going to really try to and get this thing; come to terms with it. All right with that the clock is ticking. Dr. Pierce.

DR. PIERCE: Yes, before you go on to the next agenda item. I would suggest that we could actually remove 4.3.1.2 the indecision clause. I know it is a stick. Last time around, we had a problem setting the quota for the year; but that I think was kind of a unique situation. The nature of the motions that were made, we boxed ourselves in. But then at the next meeting through your leadership skills, we ended up coming to agreement; and we set ourselves a TAC. I don't think that's needed.

CHAIRMAN BALLOU: Thoughts on that indecision clause and whether or not it needs to be kept in or not. By the way, I wasn't planning to move on to the next agenda item, I was planning to open the floor to additional comments; as Dr. Pierce took full advantage of, on other items that we haven't yet discussed. On this issue of the indecision clause, and the carrot/stick approach if you will, more of a stick I think, to get the Board to make a decision. Is that needed? Should that be kept in the document? David Borden.

MR. BORDEN: Question then, if we take it out then what happens if we don't make a decision?

MS. WARE: That's a great question. That's why we put it in. We need to specify what happens if the Board does not provide, or is not able to come to a consensus; because we were pretty close to that.

MR. BORDEN: I was going to suggest that with all due respect to the PDT, I thought as Megan characterized it carrot and stick. I was going to suggest that we use the Danvers half-long that's a carrot, a very short carrot, approach. Maybe we should pick a range of percentages there. Leave it in, but have a different range. Instead of having it be 50 percent, maybe have it be 75 percent or 90 percent. It wouldn't trouble me at all to say that the quota stays the same, or it gets reduced, and have some different percentages there.

CHAIRMAN BALLOU: Does that sound like a fair approach? David.

MR. BUSH: I certainly agree, and as a military guy I am all for accountability measures. I am uncomfortable with putting those accountability measures on the stakeholders though.

CHAIRMAN BALLOU: Further comments on this issue? We've had a suggestion to keep it in, but perhaps not make it quite so onerous with that half-cut; maybe something a little bit less onerous. I see a few heads nodding, so why don't we take that as the guidance we'll offer back to the PDT to keep this in; but not make that stick quite so heavy and dangerous. Okay, other comments or other recommendations on any other issues that Megan addressed, having to do with the draft amendment? Emerson.

MR. HASBROUCK: Megan, in your presentation a couple of times you referenced 212,500 metric tons as a trigger, I think, for different things to occur. What does that 212,500 metric tons derive from?

MS. WARE: Those are the average coastwide landings from 2009-2011.

CHAIRMAN BALLOU: I believe it was the first TAC established, wasn't it?

MS. WARE: That was what the Amendment 2 was based on, and then we took a 20 percent reduction from that.

CHAIRMAN BALLOU: I saw Dr. Duval next.

DR. DUVAL: I was actually going to go back and Megan had brought up an allocation, so if an eventual allocation method is implemented that does not have a jurisdictional component, the requirement to report landings via SAFIS. I understand that the intent is to try to provide real time monitoring; but I have concerns about this, based on North Carolina's statutory requirements that our dealers report to us.

Right now we use federal, so in order to track our quota monitored species, which we do on a daily basis for summer flounder and black sea bass. We have a dealer permit, it requires submission of a quota monitoring report; not trip ticket reports to us daily, which we can't require daily submission of trip tickets by statute.

You know we're looking to try to modify that. I think my point is that if the amendment specifies the frequency and required data elements, in terms of real-time reporting that the states ought to be allowed to submit those data and to meet those requirements; I guess is what I'm saying, and not necessarily dictate that you have to be reporting directly to SAFIS, because we're going to run into some problems with that in North Carolina.

MS. WARE: Michelle, maybe in response, where would you be submitting those reports to? What I'm trying to avoid is have the FMP Coordinator be kind of a receiver of states landings on a weekly basis. I think that that is kind of an onerous position to put the Coordinator in, so I'm just trying to put it all in some place where people could check it; and all the states could be submitting to one place.

DR. DUVAL: You know perhaps that's something that we're going to have to discuss offline. But again I raised the statutory issues that we have in North Carolina that data be submitted to us first. If we can perhaps work to try to develop an alternative that would both meet our statutory requirements, as well as not having dealers submitting information directly to the FMP Coordinator; you know we might have to find some work-around for the division submitting data to SAFIS on behalf of those dealers. That might be an alternative.

CHAIRMAN BALLOU: Rob O'Reilly.

MR. O'REILLY: Pretty much the same situation in Virginia, and so we all will have to have a

conversation about how to accomplish this if it doesn't go jurisdictional. We've had mandatory reporting on the harvester basis since 1993. As with Michelle, the data comes to VMRC, so we would definitely have to work something out if it ends up that we don't go jurisdictional.

CHAIRMAN BALLOU: Any other comments or thoughts from the Board? Eric, on any issue, the floor is open right now.

MR. REID: The 212,500 tons that Emerson referenced earlier are those percentages of allocation at that amount fixed? I'm looking at 4.3.2 Tier 1, Option E, Sub-options 1 and 2. If the 212,500 tons is subject to a reallocation that is one thing; but if our current allotments are fixed in at that number, I would like to see that entire section removed.

CHAIRMAN BALLOU: We had this discussion at the last meeting. There were some recommendations to remove that and the consensus was to keep it in. I know Rob has been a strong proponent of that option, and I'll let Rob speak to it.

MR. O'REILLY: It used to be Option H, now it's Option E. This was proposed in Maine, and the idea is that again we came relatively close to having a 10 percent increase; and then everyone knows the story of how we came back with the increase that we had. We are relatively close still, to 212,500 metric tons.

The only idea there is that there would not be fixed percentages associated, once that 212,500 is reached or is attained. They would be variable, and I think in the document it has two different percentages where the bait would receive a larger share; you know up to 70 percent, I think is what the document has.

That was the basis for that back in Maine. It remains the same. I think that last time around Nichola asked it to be removed, based on the public comment; and I had a few things to say about that which I won't say today again. But really, the public comment at that time was

really not looking at our process to the direct way. That is why that option is in there, Eric, and I don't know whether that helps you or not.

CHAIRMAN BALLOU: Eric, a follow up?

MR. REID: Yes, it absolutely helps me, Rob. It tells me that I don't like it and you do, so it is going to stay in the document for now; that's what it tells me. Okay, can I keep going?

CHAIRMAN BALLOU: Please.

MR. REID: Are you good with that Rob? I'm looking in the draft document on Pages 53 and 54. It is minimum quota plus additional quota. I don't know how much work it is. Right now the numbers that I see are 0.5 percent and 1 percent. Just for reference, I would be fine if 0.5 percent were dropped out of the document. But I would like to see some analysis at least 2 percent, and if it is not too much of a pain in the neck, 1.5 as well.

That would be my request. If we have the capability at some point to say, okay we have the analysis at 1 percent and we have the analysis at 2 percent; can we do something in the middle, or can we just extrapolate the numbers? The numbers don't extrapolate very well in my mind; but at least they're close enough for me to make a decision. I guess that's my request. Can we do a table at 2 percent without too much trouble?

CHAIRMAN BALLOU: The answer is yes, it can be done. If there is no opposition on the part of the Board to add another sub-option, having to do with minimum jurisdictional quotas, and that would be in addition to the 0.5 percent; although I know you recommended taking it out. But one thought is to keep that in, keep the 1 percent, and then add a new 2 percent option. Does that sound fair?

MR. REID: Yes, I'm fine with that. Like I said, I can't extrapolate 0.5 to 1. You can't just multiply them times 2. I would like to see what 2 percent looks like plus the addition, 2 plus X

for lack of a better term; and if I could have that I would appreciate it.

CHAIRMAN BALLOU: Okay, duly noted, other suggestions? We are running late. We've got a couple more agenda items here, but this is obviously a very important issue. David Borden.

MR. BORDEN: Just for my own edification, on the quota rollover and specifically the option to roll over 100 percent of the quota and 50 percent. I'm struggling with that a little bit, because I can't think of another example of where the system, the management system in any area has allowed the rollover of up to 100 percent of the quota.

I mean I've listened to a lot of different discussions at council meetings and commission meetings about rollovers. Generally the scientist's voice a lot of concerns, because you're a whole year later, you've had natural mortality on the stock and a whole bunch of other variables that can't be calculated. What is the scientific advice on 100 percent rollovers?

MS. WARE: The TC has not reviewed this document, so I can't really provide scientific advice from them. But we got those five options from Board input; based on the PID. If the Board would like to reconsider the options that are in there that would be useful information.

MR. BORDEN: Yes, my preference here would be to have the technical people specifically review that issue of the rollover, and whether or not it creates problems from a technical perspective.

CHAIRMAN BALLOU: Duly noted. Are there any other, suggestions, comments, recommendations from the Board on this issue? Seeing none; I had hoped to get some public input, but we're really running late. We've got a couple of other, three other actually, important issues. I don't think we'll take too much time. But we're well aware of the clock

and the need to break in either four minutes or at some point soon thereafter. We're going to move on, is there any objection to moving on? Seeing none; we'll move on to Item 7 on the agenda, which is New York Participation in Episodic Event Program. This issue was addressed in part by the Board last year, but may need to be readdressed this year to lend clarification to the issue. I'll let Megan summarize it, and set the stage for the Board's consideration.

### **NEW YORK PARTICIPATION IN EPISODIC EVENTS PROGRAM**

MS. WARE: Just to briefly review the Episodic Events Program and what it would look like in 2017. In May of 2016 the Board passed the motion to extend the Episodic Events Program until Amendment 3 is implemented. We do have the Episodic Events Program for this year. The set-aside is roughly 4.4 million pounds; and that reflects the 200,000 metric ton TAC that has been specified for this year.

In May of 2016, the Board also approved New York as an eligible state to harvest under the Episodic Events Program, so as a result for 2017, the states of Maine through New York can harvest from the set-aside; pending they meet the mandatory provisions. The Board also capped New York at one million pounds for 2016. There is currently no cap on New York's harvest for 2017.

CHAIRMAN BALLOU: That's where things stand. If the Board were to take no further action, New York is eligible to participate in the program; that may be a signal, in 2017, and is not subject to a cap. If the Board wanted to change that scenario in any way, action would be needed today. Does anyone have any recommendations or thoughts? Terry.

MR. STOCKWELL: Déjà vu from a year ago. I'll keep this quick. **I am going to move that New York harvest is capped at one million pounds for 2017.**

CHAIRMAN BALLOU: Under the Episodic Event Program.

MR. STOCKWELL: **Under the Episodic Event Program.**

CHAIRMAN BALLOU: Is there a second to that; seconded by Cheri? Moved by Terry Stockwell, seconded by Cheri, to re-impose the one million pound cap on New York's participation in the Episodic Even Program for 2017 is there discussion on the motion, Steve Heins.

MR. STEVE HEINS: Probably that's a wise move on the part of the Board, because as of today our directed fisheries closed and you can walk across the water on the backs of the menhaden; they're so thick in New York. We need this Episodic Events just to try to at least forestall fish kills. We're going to have them. It's just maybe we can put them off for a few weeks.

CHAIRMAN BALLOU: Further discussion on the motion, Eric Reid.

MR. REID: I just have a question. How much tonnage or poundage did New York harvest last year?

CHAIRMAN BALLOU: Megan is looking into that and while she's looking into it, any other questions or comments on the motion? Seeing none; we'll wait for the answer to that and then we'll take a vote. Steve.

MR. HEINS: If you don't need an exact number, I think we were around (struck from the record due to confidentiality) of the Episodic.

MS. WARE: I don't have your episodic number actually, because I believe it is confidential; but total state landings were roughly 1.4 million, so that is bycatch, episodic, directed.

CHAIRMAN BALLOU: Do you want to just let your comment stand, Steve?



MR. HEINS: Well, I know that we didn't hit the one million mark; but that was because we had reached a point where we believed we had gotten out of the woods. Then in November we had (struck from the record due to confidentiality). I can't really judge this anymore.

MR. REID: I would like you to give a million pounds to Rhode Island of Episodic Event, but I don't think that's going to happen. No, I'm fine. If Rhode Island is going to be out of the fishery because Episodic Event gets used up again; that would be unfortunate for the state of Rhode Island. That's all I'm going to say.

CHAIRMAN BALLOU: Other comments? Robert Boyles.

MR. BOYLES: Mr. Chairman, parliamentary inquiry. I would like unanimous consent to strike Mr. Heins comments from the record; on the basis of information from staff.

CHAIRMAN BALLOU: Given the potential confidentiality?

MR. BOYLES: Yes.

CHAIRMAN BALLOU: Is there any objection to striking those comments from the record to protect any potential violation of confidentiality? Seeing no objections those comments will be struck. Thank you for that suggestion. Other comments on the motion, seeing none; is the Board ready for the question? If so, all in favor of the motion, I'm sorry, 15 second caucus.

Okay I'm going to call the question. **All in favor please raise your hand, 18 in favor, opposed, null votes, and abstentions. The motion passes 18 to 0.**

**PROVIDE GUIDANCE TO THE TECHNICAL COMMITTEE REGARDING STOCK PROJECTIONS**

CHAIRMAN BALLOU: And we're on to Item 8; which is to Provide Guidance to the Technical Committee Regarding Stock Projections. This is a prelude to setting the TAC for 2018; which will be on our agenda for our next meeting in August. I believe our TC Chair, Jason McNamee has a presentation, so at this point I will turn it over to Jason.

MR. JASON McNAMEE: We at the Technical Committee were sitting around chatting, and we said do you know what the Board hasn't heard from us in about three months, projection methodology. Let's do that again. I've got a quick presentation. This will help support the addendum. Kristen, if you want to jump right to Slide 4, we can skip some of that early stuff.

**REVIEW STOCK PROJECTION METHODOLOGY**

MR. McNAMEE: I'm just going to give you a whirlwind tour. The projection methodology has not changed the past several times that you've seen it. Monte Carlo bootstrap runs of 2015, the approved assessment, the base run of that approved assessment was used for the basis of the projections. They were run under various scenarios for a total of five years since that terminal year. Starting conditions include initial numbers-at-age, which were the estimated numbers-at-age for Year 2014 from BAM, for each of the Monte Carlo bootstrap runs. Monte Carlo bootstrap runs, it's just an iteration of the model. Certain elements of the model have a little perturbation to their starting values, and you end up with about a thousand different versions of the world. They're all very close but slightly different, and that's where you kind of determine your variability in your estimates. The numbers-at-age after that initial year, a fancy equation to look at here, the important element there is that Z parameter up in the air there. What that is is age and year specific total mortality.

What that consists of is it's the addition of the natural mortality for each age for that year, plus

the fishing mortality that takes into account the selectivity by age. The natural mortality for each of the projections was a vector from each of the Monte Carlo bootstraps; the selectivity again also a vector from each of the Monte Carlo bootstraps.

In this case the northern and the southern fishery selectivities, they're the values from the last time period; so there are a couple of blocks in the BAM model, and we're just grabbing the last blocks of the estimate from the last period of time. Then fishing mortality is estimated to match the annual landings that are estimated.

These landings, where do those come from? Those are calculated using the Baranov Catch Equation and the weight of the landings. There is recruitment in there. This is an important one to think about. Recruitment is projected without an underlying stock recruitment function, so there is no Beverton Holt or Ricker model in here.

What we're doing is taking median recruitment level, and that's the median from each of the 1,000 bootstrap runs. Then the way we get variability in there is there is a deviation vector in there; and so there is this vector, it's the length and it is the number of years that you're looking at. We have a median recruitment level, and then each year is a deviation away from that median. That is where your uncertainty comes from.

Those are selected randomly with replacement from each of the runs. All right, so we do all that stuff and we get some outputs. These are relevant outputs for you folks. They include fecundity, so remember that that is what we use as the biomass metric for menhaden. It produces fishing mortality, recruitment and landings.

Those are the model outputs that you get from the projections. Fecundity is calculated as the number of fish in each age times the reproductive vector at that age. We know a

little bit about, or a lot about the fecundity of menhaden. That's all taken into account here. We use a 50/50 sex ratio, the maturity as we understand it for menhaden, mash that up all together and that's how we come up with the fecundity estimate. A couple of caveats for you, we did not include structural uncertainty in the projections.

This is model uncertainty is another way that people characterize it. There are lots of uncertainties that are accounted for; but this is not one of them. The projections are conditional on a set of functional forms. These are things like the selectivity function, which is a curve and recruitment as I've described.

The fisheries were assumed to continue at the current proportions of allocation; meaning bait and reduction using the current selectivities. The selectivity aspect of that is the important part. New management regulations that alter the proportions or the selectivities, would likely affect the projection results. Just be aware of that. If future recruitment is characterized by long periods of large or small year classes that is also going to impact the projections. You know when we end up at Year 5, and the answer is different than what we projected. There are a number of reasons why that is.

Additionally, because we're using the Baranov Catch Equation, it is assuming mortality occurs throughout the year. Again, if seasonal closures and things like that go in that is going to affect the outcomes of reality versus the projections. All right, just a couple of slides here, we can think back. This is what you had asked us for last time we did projections for you.

Current TAC is not the current TAC now, it is the current TAC back when we did these; but that was like a status quo projection you asked for. Then we did a series that were fairly simple, they were just increases from that TAC and then that was projected forward. Then you did a series where you were thinking more about risk; and you asked for three different levels of

these risk probabilities of being at or below the F target.

In summary, we are performing, and by “we” I mean Amy Schuler who’s in the back there. We’re performing new projections based on previous guidance from the Board; and as outlined in the presentation. We added in some new scenarios that include interim ecological reference points as requested.

As Shanna already noted, we conferred with the folks at Lenfest to make sure that we were interpreting their intent, so we’re all on the same page there and we don’t bring something forward that then someone might come back and say no that’s not what we meant by that. We’ve done that homework. We are on track, I have completion in August. That’s right, right? Yes. We’re on track with the work. That’s it; any questions?

CHAIRMAN BALLOU: Questions for Jason? Adam.

MR. ADAM NOWALSKY: Did I understand correctly that you’re going to apply those same projections, the 5 percent increase, the 10 percent increase, the 50 percent probability, the 55 percent probability. Was that what I heard or did I mishear that?

MR. McNAMEE: That is not what I showed. I just wanted to show you the types of things that we have done for projections in the past as an example. I’m not actually entirely sure the exact ones that we’re doing, and so Megan or Bob, if you have a better idea.

CHAIRMAN BALLOU: The issue I think for the Board, is the Board comfortable asking that those same projections be run again? Yes, it would be repeating the same, whatever it was seven runs I think, there is more actually when you add in some of the additional ERP type approaches. But is that what the Board would like to see again?

In the same way you saw it last year and use that as the basis for your deliberations on setting the TAC for 2018, or would you recommend doing something different, either reducing those options or changing them that is the issue before the Board today. I guess the question is if we don’t have any recommendations to change anything, we’ll run the same projections in the same way that they were run last year; and you’ll get a report on those at your August meeting. This is the time to recommend any changes. If you don’t have any recommended changes, you will see those same projections done in the same way. It must be getting late, because I don’t see any movement, anybody shifting; except I see one hand up in the back. Rob.

MR. O’REILLY: Yes, I support moving ahead with those same runs. The second thing is, I will ask one question and I know it’s late. What really determines the risk against the target F, and is there any uncertainty there in the risk? Bog you down, kind of curious.

MR. McNAMEE: What determines that is, so I had mentioned we do these Monte Carlo bootstraps, so you end up with these variations of the universe as you move forward; and they’re different from each other. What you do in the end is you kind of bound all of the different projections.

That’s what determines that envelop of uncertainty around some median value or something like that. If you picked it to be right at the median it would be 50 percent probability, and then you move up and down from there. It is all of the uncertainties coming out of the bootstrap on the elements in the projections that we put those perturbations on.

CHAIRMAN BALLOU: Any other question, comments, is there any opposition to tasking the TC with running the same projections that they ran last year in the ways just described? Seeing none; I’ll take that as Board support for a repeat, and we’ll look forward to the results

that we'll see in August. Is there anything else on this issue?

**CONSIDER APPROVAL OF THE 2017 FMP REVIEW AND STATE COMPLIANCE REPORTS**

CHAIRMAN BALLOU: Okay so on to our final issue. Consider Approval of the 2017 FMP Review and State Compliance Reports. States were required to submit their compliance plans by April 1, the PRT reviewed those plans and reported out via the FMP Review, which is in your meeting materials; so Megan, I think has a brief summary report. Megan.

MS. WARE: We're going to go right to Slide 4 to just kind of get to the meat of the FMP Review. For 2016 our TAC was 414.2 million pounds. Overall I would say landings were down from 2015. Our directed harvest, which excludes bycatch, was 396.15 million pounds; so that's 4.4 percent under the TAC and a 3.6 percent decrease from 2015.

Bycatch was 2.18 million pounds, which is a 63 percent decrease from 2015; but it's important to note that those landings do not count towards the TAC. Total harvest including bycatch, directed harvest, and the Episodic Events Program was 398 million pounds, which is a 4.5 percent decrease from 2015.

We can also look at the landings by the different sectors. Looking at bait harvest it is roughly 95.4 million pounds, which is a 5.6 percent decrease from 2015, and a 10.1 percent decrease from the previous five-year average. The states of New Jersey, Virginia, Maryland, Maine and Massachusetts landed the largest shares.

Reduction harvest was 302.9 million pounds, which is a 4.2 percent decrease from 2015, and a 6 percent decrease from the previous five-year average. In terms of the Chesapeake Bay reduction fishery cap, landings were less than 45,000 metric tons; which is well below the cap. This means for 2017 our cap will be the full

87,000 metric tons plus the almost 11,000 metric ton rollover. This is one of the figures in the FMP review, which shows reduction landings in blue and bait landings in red. It is important to note that there are two different Y axes here, so reduction landings are still higher than bait landings. But overall we've seen a slight decline in reduction landings over the years, while we've seen a slight increase in bait landings. This is Table 1 in the FMP review; and I recommend looking at it in the printed document, because it is much easier to see.

But it shows average bycatch landings by state and gear type from 2013-2016. The predominant gears include pound nets and anchored or staked gillnets; and the states of Maryland and Virginia contribute the most to total bycatch landings. We can also look at the number of bycatch trips that were taken in 2016.

There were a total of 1,908 bycatch trips taken in 2016. This is significantly lower from the 4,668 trips taken in 2015. The majority of these trips did land less than 1,000 pounds. In terms of the Episodic Events Set-Aside Program, the states of Maine, Rhode Island and New York participated in the program; 3.8 million pounds were harvested in 2016, which is a much greater value than has ever been harvested under the program.

Ninety-two percent of the set-aside was used, but the remaining unused set-aside was reallocated to the states on November 1st. Table 3, this is quota performance, and I definitely recommend looking at this in the FMP review. But what it shows here is on a state-by-state basis the transfers that took place, what the total quota was, in terms of what a state was allocated, plus or minus transfers and then the redistribution of unused set-aside.

Then it shows what total landings were and if there were any overages. We had one state with an overage; that was Florida. It is only 4,000 pounds though. Then the final column there is 2017 quotas. This is based on the

200,000 metric ton TAC, as well as any overages that took place in 2016.

Non de minimis states are required to conduct biological monitoring based on their landings, as well as the geographic region. This is Table 6 in the FMP Review; it shows the number of ten fish samples that were required, and then the ones that were carried out by each state. All states did meet the biological sampling requirements.

In terms of de minimis, the states of New Hampshire, Pennsylvania, South Carolina, Georgia, and Florida have requested de minimis status for 2017. All states qualified, because they do not have a reduction fishery and the bait landings in the two most recent years of data did not exceed 1 percent of coastwide bait landings.

The PRT recommends that the Board accept the 2017 FMP Review, de minimis status for the five states there, and then also notes that jurisdictions which repeatedly or grossly exceed their quota, should consider implementing more frequent reporting to avoid these overages.

CHAIRMAN BALLOU: Questions for Megan on her report? Dr. Duval.

DR. DUVAL: Not a question, just a comment. Megan, I believe you received information last week correcting North Carolina's 2016 landings. They are roughly about half of the 800,000 pounds that was shown up on the screen. We had a coding error with landings from a particular dealer, so that has since been corrected.

CHAIRMAN BALLOU: Any other questions? **If not I would entertain a motion to accept the 2017 Fishery Management Plan Review, and approve de minimis request for the states of New Hampshire, Pennsylvania, South Carolina, Georgia and Florida. Moved by Steve Heins, do we have a second?** Seconded by Cheri

Patterson, is there any discussion on the motion?

Is there a need to caucus? Seeing no indication, is the Board ready for the vote? **If so, all in favor raise your hand, 18 in favor and that's unanimous**, so I think we are at the last item; which is Other Business.

#### **Other Business/Adjourn**

CHAIRMAN BALLOU: Is there any other business to come before the Board? Seeing none; is there any opposition to adjourning? Seeing none; we are adjourned. Thank you very much.

(Whereupon, the meeting was adjourned at 6:05 o'clock p.m., May 9, 2017.)