

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

**Crowne Plaza - Old Town
Alexandria, Virginia
May 15, 2014**

Approved February 3, 2015

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1. **Approval of Agenda** by consent (Page 1).
2. **Approval of Proceedings of February, 2014** by consent (Page 1).
3. **Move to approve the 2014 Fishery Management Plan review for Atlantic Menhaden and approve *de minimis* requests for New Hampshire, South Carolina, Georgia and Florida** (Page 12). Motion by Tom Fote; second by Pat Augustine. Motion carried (Page 15).
4. **Move to adjourn by consent** (Page 20).

ATTENDANCE

Board Members

Steve Train, ME (GA)	Roy Miller, DE (GA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Bernie Pankowski, DE, proxy for Sen. Venables (LA)
Doug Grout, NH (AA)	Lynn Fegley, MD, proxy for T. O'Connell (AA)
G. Ritchie White, NH (GA)	Bill Goldsborough, MD (GA)
Jocelyn Cary, MA, proxy for Rep. Peake (LA)	Russell Dize, MD, proxy for Sen. Colburn (LA)
Paul Diodati, MA (AA)	Rob O'Reilly, VA, proxy for J. Bull (AA)
Bill Adler, MA (GA)	Sen. Richard Stuart, VA (LA)
Robert Ballou, RI (AA)	Cathy Davenport, VA (GA)
Rick Bellavance, RI, proxy for Sen. Sosnowski (LA)	Louis Daniel, NC (AA)
David Borden, RI, proxy for B. McElroy (GA)	Robert Boyles, Jr., SC (AA)
David Simpson, CT (AA)	Ross Self, SC, proxy for Sen. Cromer (LA)
Dr. Lance Stewart, CT (GA)	Patrick Geer, GA, proxy for Rep. Burns (LA)
James Gilmore, NY (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Pat Augustine, NY, proxy for Sen. Boyle (LA)	Martin Gary, PRFC
Tom Fote, NJ (GA)	Steve Meyers, NMFS
Russ Allen, NJ, proxy for D. Chanda (AA)	Wilson Laney, USFWS
John Clark, DE, proxy for D. Saveikis (AA)	

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

Ex-Officio Members

Jeff Kaelin, Advisory Panel Chair

Lloyd Ingerson, Law Enforcement Representative

Staff

Robert Beal
Toni Kerns
Marin Hawk

Genny Nesslage
Mike Waine

Guests

Arnold Leo, E. Hampton, NY

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crown Plaza Hotel Old Town, Alexandria, Virginia, May 15, 2014, and was called to order at 9:45 o'clock a.m. by Chairman Robert H. Boyles, Jr.

CALL TO ORDER

CHAIRMAN ROBERT H. BOYLES, JR.: Good morning, everyone. My name is Robert Boyles; I'm Chair of the Menhaden Management Board. I would like to welcome everyone here to the spring meeting of the Menhaden Management Board.

APPROVAL OF AGENDA

CHAIRMAN BOYLES: Our first item on the agenda is seeking board consent for the approval of the agenda.

The agenda was sent out to you in your briefing materials. Are there any additions to the agenda? Seeing none; the agenda will stand approved by consent.

APPROVAL OF PROCEEDINGS

CHAIRMAN BOYLES: Next is the approval of the proceedings from the February 2014 meeting. Again, those proceedings were sent out to you on the briefing material. Are there any additions or corrections to those proceedings? Seeing none; those proceedings will stand approved by consent.

PUBLIC COMMENT

CHAIRMAN BOYLES: Next is the opportunity for public comment for those items that are not on the agenda. We have got a couple of folks who have indicated an interest in making public comments to the board. If you would come up to the public microphone and if you would keep your comments to three minutes, we would appreciate it. Mr. Ken Hastings.

MR. KEN HASTINGS: I would like to start off by expressing my appreciation to Ms. Tina Berger for the help she gave me Friday evening.

It was after eight o'clock on a Friday and I was having trouble getting some information off the web. It was like I was in a chat room with a technician; and I really appreciate that.

I wanted to address something that came up at the Georgia Annual Meeting; and that's the idea of some sort of accountability for harvest reporting. I know it was discussed after the agenda was approved in Georgia and several people in this audience, maybe not sitting here but representing these jurisdictions, expressed a concern that they didn't know before the 20 percent cut went into effect how many fish they were actually catching.

They also expressed some concern that in 2013 they didn't have a clue about how many they were catching now. Okay, that certainly puts this whole process in jeopardy if they were right. I think this board recognized and by consensus agreed to have some discussion about accountability for catch reports at some future date. That didn't actually happen.

It was supposed to happen in February and it didn't happen then; and I see it is not on the agenda today; so I figured it was all right for me to speak about it. Note that this is not my initiative; this is not me sitting here trying to rake up trouble. This came from within. Your members said they had a problem. They were concerned about that they were catching more fish than you were supposed to and more fish than they were reporting. It is probably not just two states.

I think the problem is the unaudited volunteer catch reports. I think the opportunities for abuse there are rampant and historically supported we caught too many fish. That is not debatable; and I think there is going to be some more discussion of that here today; I hope so when you get down to the bycatch part.

The bycatch situation is just compounded by this underreporting. You don't know how

much was caught during the regular season and you don't know how much was caught afterwards. I hope you have a solution for this. I hope that this discussion that was supposed to happen did happen, even though it didn't happen publicly and I missed it; and I really hate when that happens. I don't think you can continue to ignore this issue if that's what you're doing. Thank you.

CHAIRMAN BOYLES: Thank you, Mr. Hastings. Next we will have Ken Hinman.

MR. KEN HINMAN: My name is Ken Hinman; I'm President of Wild Oceans. The first thing I want to do is congratulate the entire commission in I think what can only be considered a very successful first-year implementation of Amendment 2. I know there are a number of bugs to iron out, but I think it has been going very well.

A year ago I was here urging you to continue your work on developing ecological reference points for Atlantic menhaden; and noting that a working group had been assembled to take on this task, I pointed out that considerable work has been done over the past two decades to suggest targets and thresholds for important forage species like menhaden and that a remarkable consensus has emerged.

The work being done by the BERP Working Group, which I have been following since its first meeting, is aiming toward development of a multispecies or ecosystem model that quantifies the relationship between menhaden and some of its key predators. Such a model, though highly complex and data-intensive, may someday help the board better understand the tradeoffs among concurrent management strategies for multiple species.

However, the most sophisticated ecosystem model cannot in and of itself reveal what amount of fishing for a key forage species should be allowed or what amount to leave in the water. The starting point for developing of reference points of any kind is clearly defined management objectives.

The 1999 Stock Assessment Peer Review Panel put it this way 15 years ago: "Until management has specified an allocation goal for menhaden as a forage fish or filter feeder, it will not be possible to develop a reference point to conserve menhaden's ecological function." In other words, establishing reference points for menhaden is ultimately an allocation of prey between human and natural predators, which is a policy decision to set aside a portion of the menhaden population as a reserve to serve predator needs.

How is this forage set-aside or allocation goal determined? Fortunately, the board can take advantage of the substantial effort that has already been put in defining a practical approach to answering this question; work that has produced a consensus on ecological reference points for forage species; and I think very importantly reference points that can be applied to single-species stock assessments like the one underway for menhaden now.

Now, in a June 2009 paper we submitted to the board and technical committee, we made recommendations based on a review of forage fish policy in the scientific literature up until that time. Now since then, more recent studies by well-regarded groups of U.S. and international scientists have affirmed this previous work; establishing what could be considered an authoritative standard; the best available scientific advice for the default position on ecological reference points for forage species.

I have submitted 50 copies of a Wild Oceans Briefing Paper that summarizes this work, its conclusions and its recommendations. We urge the board to review this State of the Science Guidance on ecological reference points while the new benchmark stock assessment is completed and to initiate an addendum for the adoption of new reference points beginning in 2015. Thank you very much.

CHAIRMAN BOYLES: Thank you, Mr. Hinman. Is there any other public comment?

2014 FMP REVIEW AND STATE COMPLIANCE REPORT

CHAIRMAN BOYLES: Okay, seeing none, the next item on the agenda is the 2014 FMP Review and State Compliance Report.

MR. MICHAEL WAINE: I'm going to walk us through the 2014 FMP Review, which takes a closer look at the performance of the 2013 fishery. We implemented Amendment 2 in July of last year. That amendment established a coast-wide TAC until the completion and board action on the benchmark assessment that we're currently working on. The TAC is 170,800 metric tons.

We set aside 1 percent of that for these episodic events, which is when menhaden occur in higher abundance than normal, and it is restricted to the New England states. We allocated that TAC on the 2009 through 2011 landings' history. The amendment allows transfers of quota. We have a 6,000 pound bycatch allowance for non-directed fisheries; and there was a reduction to the Chesapeake Bay reduction fishery harvest cap.

We also implemented some recommendations for timely reporting; and we improved biological monitoring in that document. This next couple of slides just walks the board through a few changes that have occurred since implementation of Amendment 2. We've provided some flexibility in that document to give the board flexibility to make some changes, so I just wanted to update everybody on what those were.

In 2013 the board had approved a bycatch allowance that enabled two permit holders aboard one vessel to harvest 12,000 pounds. I just wanted to remind the board that was just for 2013; so now it is back to the 6,000 pound per vessel bycatch trip limit per calendar day. In October of 2013 the board extended the episodic event set-aside program through 2015.

It also included a reallocation provision that rolls over any unused set-aside to the states on November 1; and that would be allocated based on the same percentages that were used for the Amendment 2 quota allocation. Then at the last board in February the board passed a motion to manage cast net fisheries under the bycatch allowance through 2015.

Currently the status of the stock; we've got interim reference points that are based on maximum spawning potential, thresholds and targets that match up between fishing mortality and SSB. Based on the 2012 stock assessment update, the stock is experiencing overfishing, but the overfished status is unknown because of the uncertainty in the model runs we walked the board through this before.

Of course, the stock assessment subcommittee is completely revamping the assessment that we're currently working on; and you've been receiving quarterly progress reports on that assessment progress and will receive another one today. As we heard from the public, we are developing ecological reference points; and these reference points that we have currently are intended to be interim until we can get those in place and developed.

Moving into the fishery; total coast-wide harvest for 2013 was 166,077 metric tons. That is a 26 percent decrease from 2012 levels. That is the amount that counts toward the TAC. We have this bycatch allowance where the harvest under that allowance doesn't count towards the TAC; and for 2013 that ended up being 1,942 metric tons; so just to give the board a sense, that is 1.2 of total coast-wide harvest is what the bycatch accounted for.

If you ended up including the bycatch harvest in with the reduction in the Bay harvest, we are still under our coast-wide TAC. Just a little bit about each fishery; for the reduction harvest, we landed 131,034 metric tons. That is an 18 percent decrease from 2012 and an 18 percent decrease from the previous five-year average.

For the bait harvest, they landed 35,043 metric tons. That is a 45 percent decrease from 2012 and a 29 percent decrease from the previous five-year average. Just a figure that shows graphical representation of both of these fisheries; the reduction landings are in blue and the bait landings are in red; and you see the decrease in the terminal year there.

Moving into the bycatch analysis, we do have an agenda item that is going to talk about this more specifically next. I just wanted to alert everybody that bycatch totaled 4.28 million pounds. A majority of these landings came from the Chesapeake Bay area and that can be attributed to their pound net fishery of which we've talked quite a bit about.

You can see the different gears that have been landing bycatch in the column there. It is 90 percent of bycatch landings are coming from pound nets. What we ended up doing was the plan review team did an analysis of the trips by thousand pound bins. Because we had that provision that allowed two permit holders on one vessel to harvest up to 12,000 pounds, we ended up just truncating all those trips that landed more than 6,000 pounds in a 6,000 pound-plus-category.

What I wanted to show is that a majority of the trips here are landing less than a thousand pounds. You can see the percentages associated with the thousand pound bins; and there was roughly 2,472 trips total that were reported under a bycatch allowance. Moving into the episodic event set-aside, that program was for the New England states, Maine through Connecticut.

Maine, Massachusetts and Rhode Island all qualified for the set-aside program; and to qualify they had to implement mandatory fishery management provisions of the set-aside, which was daily reporting a pound trip limit and restricting harvest to state waters. In 2013 Rhode Island was the only state that declared participation. They have a very extensive biomass survey that they use in Narragansett Bay. They did observe high levels of biomass in

early summer; but that biomass did not end up returning to their state waters in the fall. Although they declared participation in the set-aside, there was no harvest that occurred. On November 1 we ended up reallocating all of that set-aside back to the states. As far as 2013 quotas are concerned, there is a Table 1 in the document that sort walks through all of this. We had some transfers that occurred in season.

Massachusetts transferred to New York to cover an expected quota average; and then after the season was completed, we had a transfer from North Carolina to the states of New York, Florida and Rhode Island to cover their quota overages. As far as reporting is concerned, the plan review team focused in on states that experienced quota overages in terms of reporting.

Basically through Amendment 2 we wanted more timely reporting. The intent of that was to minimize the chance for a quota overage. After reviewing the fishery, we were basically looking at the states that actually had overages; what is their reporting structure; does it need it be improved, that sort of thing.

New York has monthly reporting but has the capability of requiring weekly reporting if needed. Florida has monthly reporting and call dealers weekly but documented late reports is an issue for 2013. All other states implemented reporting that adequately covered their quotas. There is a table in the FMP Review that shows exactly what each state's monitoring approach was and whether that was a dealer reporting or harvester reporting.

Another requirement that we put through in Amendment 2 was collection of biological samples. The intent here was to enhance information that would be used directly in the stock assessment. We wanted to get a better idea about the size and age structure of the bait fishery. The requirement there was to collect – for the Chesapeake Bay it was to collect one 10-fish sampled for every

200 metric tons landed. For the Mid-Atlantic and New England area it is one 10-fish sampled for every 300 metric tons landed.

I'm actually fairly excited to see that most states were able to really ramp up their collections and able to obtain these improved data for the assessment. We had a few shortcomings in New Jersey and PRFC. These states, in terms of PRFC, they did collect the amount of age and length samples that we needed; but the reason that we are requiring it in a ten-fish sample is so that we can get the variation in the catch.

If there are differences in size or age distinctions within a certain harvest event, we want to make sure that is captured; and that is why it is a ten-fish sample that is required. I was able to talk the stock assessment subcommittee and that was the reasoning behind that; and I just wanted to confirm that with them.

Some of these states just cited the first year of implementation; some struggled with communication and that sort of thing. I just threw this table in here – this is Table 1 from the document – just documenting exactly how things occurred starting with a quota, the reallocation of the set-aside, showing what the transfers were, what the 2013 landings were and then progressing into what your 2014 quota is.

I won't go through each of those individually but that is all in the document. We also have adult catch-per-unit effort index requirement that we put through in Amendment 2. As you remember, the assessment uses the PRFC index of abundance; and we wanted to enhance once again the data used in the assessment; and so this requirement was intended to be able to develop a similar index from other states that have a pound net fishery.

This is before the stock assessment subcommittee really dove into all of these indices and evaluated their use through the benchmark assessment process; but I'll just note that all states but North Carolina have this requirement; and it is just a reporting issue. North Carolina had indicated this during their

implementation plans and the board approved it as is at that point.

Regarding the Chesapeake Bay Reduction Harvest Cap; the board also made an adjustment to that through Amendment 2. It was a 20 percent reduction just like they took from the 2009 through 2011 average harvest. In 2013 the reduction fishery landed approximately less than 40,000 metric tons in the Bay; and so that is below the cap and therefore there is a rollover provision that we carried through, which was also reduced and so this represents their new quota of 98,000 metric tons, roughly, for the Chesapeake Bay specifically.

In regards to de minimis, the states of New Hampshire, New York, South Carolina, Georgia and Florida all requested de minimis status for the 2014 fishing season. To be eligible for de minimis your specific state bait landings cannot exceed more than 1 percent of the coast-wide harvest for the last two years. Because New York's bait landings exceeded that 1 percent in 2013, they're not eligible for de minimis; but all the other states are that requested; so we recommended that they be approved for de minimis status.

In terms of where we're at, to wrap everything up, we have a few recommendations on just some things that we touched on that the board consider the reporting timeframes of New York and Florida to minimize future quota overages; that the board consider the compliance of the PRFC and New Jersey with the monitoring requirements; that they consider North Carolina with the Adult CPUE Index; and the de minimis requests from all the states. That concludes my report and I will take any questions.

CHAIRMAN BOYLES: Are there questions for Mike on his presentation? Paul.

MR. PAUL DIODATI: First of all, I want to thank you, Mike; that was a very good report, very easy to understand given the

volume of this fishery. I continue to get stakeholder questions primarily about how we deal with bycatch in terms of addressing it relative to the quota and relative to the stock assessment. If someone could just briefly clarify that issue, I think that would be helpful for the record.

MR. WAINE: The board, when they took final action on Amendment 2, decided several things, obviously, but in terms of bycatch they decided not to have it count towards the quota and they wanted to evaluate afterwards what the magnitude of those landings were and then consider is it significant enough that we really need to be incorporating this into the management of the quota basically.

It currently doesn't count towards the quota. I'll just note that in 2013, if it did count towards the quota, we still would have been under. In terms of the assessment, all of the landings that occur on menhaden that we have documented are included in the assessment process. Although our management treats it differently, it is not treated differently in the assessment and all of those landings are included.

MR. DIODATI: And in follow-up given what we saw, our estimates for the bycatch are extremely low, it looks like less than 1 percent, maybe 0,05 percent of something like that of the total harvest; so given that, we will continue on the road that we are with the current strategies.

MR. ROB O'REILLY: Mike thanks an awful lot for the report although it went fairly quickly; so I hope you don't mind a few question and comment initially on the bycatch – the Chesapeake Bay with its pound net, I want to make it clear that the Virginia pound net fishery did not close in 2013. That was not part of the Chesapeake Bay bycatch. It was the gill net and haul seine fishery.

Mike did have a table up there to show that, but I wanted to make sure everyone understood that. I have question concerning the de minimis request – and, Mr. Chairman, if you want me to wait and not lump questions together, I will be happy to do that so others can have a chance

here; but on the de minimis request what gets diluted in the reporting, if anything, if you're in de minimis?

I know this has always been a question with other plans; so is there anything that gets diluted by being in de minimis as far as reporting goes. Then on the reporting end of it – so this is an add-on – what are reporting frequencies for the states? I know there was a mention for New York that New York could do weekly reporting. I guess the question would be would that further the betterment of the data collection? I mean, that is really a question I have; so if you could tackle those, I'll come back later. Thanks a lot.

MR. WAINE: To your first question on the de minimis; it exempts from collecting biological samples and the CPUE index requirement. The board also actually approved an exemption for timely monitoring for the states of New Hampshire and South Carolina; and that was basically because they have such miniscule landings.

That feeds actually quite well into your second question, which was what are the reporting timeframes for all the states? I actually couldn't squeeze this table into a slide; so rather than have you guys squint at the screen, if you look at Table 2 it details the reporting timeframes that each state used in 2013; noting that some states do have both harvester and dealer reporting. I bolded the reports that the states used to monitor their quotas; so that should help you out, Rob.

MR. ROBERT BALLOY: Mike, I agree, an excellent report. I'm curious as to whether you know how much of the episodic event set-aside quota, the 3.7 million pounds that was reallocated on or about November 1, was in fact harvested during the subsequent two months of the calendar year?

MR. WAINE: That's a good question. To be honest, we didn't look specifically at that. If we were going to do that, we'd have to

look at trip level data that occurred after November 1. I think we could do that, but it would be a little bit of a lift for all the states to get us that information.

MR. PATRICK AUGUSTINE: As the others, that was a great report, Mike. Looking at the bycatch numbers – and I guess I want to attack this from a different point of view. As you all know, our reporting was terrible in past years; so our records showed we did not have adequate catch to come up with any decent-sized quota share. We're set at 200,000.

We thank the states who were kind enough to transfer quota to us. The amounts of menhaden that were caught in the bait fishery is just kind of astronomical; and I think it is common for us. The real question is, is there any intent in the near future, whether it is two years or three years, to go back and look at the actual base numbers to see if maybe it is time to shift those number around so they'd be more practical and realistic? We appreciate the ability to have the cast nets considered the way they are. It relieves us of a major problem; but at the same time it is not a real great way to manage. If you can help me on that point; I would appreciate it.

MR. WAINE: Pat, I think your question is when do we revisit quota allocation? In Amendment 2 it is after three years of implementation; so technically I guess that would be in 2015 or transitioning into 2016. I think the board could consider that in the next management action if that was what they wanted to do; because also in Amendment 2 you don't have to wait three years is my point. You could do it sooner.

MS. LYNN FEGLEY: Mike, I wanted to ask – one of the things the state of Maryland in our implementation plan; we stated that we were going to manage our 2013 fishery – we were going to close it at a very conservative date because we couldn't get the regulations for reporting into place fast enough.

Indeed, we did close our fishery with over a million pounds left on our quota. We closed at about 4.12 million pounds, which is a little bit

over one million pounds under our quota. I'd like to ask – I know there was no provision in the plan; but I'd like to ask if there is a way to credit some of that bycatch balance back to our quota? What it does is it essentially changes the magnitude of the bycatch; and I just wanted to make that point as the public as well, considering it, understand that there was some of those fish that were caught as bycatch but could have been caught under the quota. Thank you.

CHAIRMAN BOYLES: Jeff from the advisory panel had something to respond to, Bob, your question.

MR. JEFF KAELIN: It is nice to be up here. Mr. Windley unfortunately is ill and had to retire; so I'm here now as the AP chairman. We haven't had a meeting so I'm not commenting for the advisory panel; but I wanted to respond to Mr. Ballou's question about the use of the episodic event quota that was returned to the states.

I think if you'll look in Table 1 you will see that the landings were below the eventual total 2013 quota, which includes the return of the 1 percent, Bob. I think the fact that it comes back so late makes it unusable, frankly, and I think that certainly was the case in New Jersey. I appreciate the chance to make that comment.

MR. DAVID V.D. BORDEN: I'm just curious about the bycatch issue. If you look at the bycatch landings, 96 percent of the bycatch are caught by the Chesapeake states; and the total poundage is approximately 4 million pounds. What volume of other fish was landed by those gear types during that period of time? In other words, if it is 4 million pounds of menhaden; how much other fish did those gear types harvest?

MR. WAINE: It is not a question I can answer and maybe the Bay states have some understanding about what that was. That wasn't part of the reporting requirement to have an estimate of what other fish species were landed with those menhaden landings.

MR. BORDEN: If I might, Mr. Chairman, I just make a comment; but I think that should be part of the reporting requirement. I think it will help all of us determine whether or not these are quasi-directed fisheries or they're actually truly bycatch fisheries.

MR. O'REILLY: So for one Chesapeake Bay jurisdiction; again, our pound net fishery remained open; so it was the gill net and the haul seine that closed. I don't have the composition. The haul seine is a mixed-species fishery. The gill net has some other species but is not as mixed as the haul seine or the pound net would be.

MS. FEGLEY: I just wanted to address the other species' question from a Bay state, if I could. Our pound net fishery for striped bass opens on June 1st and we closed our menhaden pound net fishery on June 29th; so what was caught in part during that closed period was the majority of our striped bass harvest.

MR. MARTIN GARY: Robert, also to address David from the PRFC perspective; again, it is a mixed species catch for us; so striped bass starts like Maryland, like Lynn said, in June, but it is a mix of white perch, croaker, spot, bluefish, gizzard shad, et cetera. David, that is just to give you a quick snapshot of what we're catching in our fishery.

MR. O'REILLY: Not to that question, but I did want to follow up, if I may, on an earlier question, which is for New York somewhere the idea of weekly reporting was introduced in Mike's presentation. I need a sense of whether that is an improvement, because I know New York has indicated to the board for a couple of years now – and Pat just indicated as well – about the reporting situation.

Is that something that would make a big impact in getting more accurate reports for menhaden? I mean it was there so I want to ask about it. Then if I can just ask a second question; I'm not sure with Florida where this ended up. Jim, were you going to tell us exactly where the landings were or is there more to talk about Florida. Again, I only say that because the

presentation was rather quick. I kept up with certainly most of it but I do have that question as well.

MR. JAMES GILMORE: We are going to look into doing weekly reporting, Rob. We're revamping our reporting; but at a 200,000 pound quota, I'm not even sure I'm going to open the fishery. It has gotten to be kind of silly. But, yes, we should be able to do that. We do have the capability. It is just a matter of how soon we can implement it and does it really make any sense?

MR. JIM ESTES: Our reporting issue is a little bit more complicated. What we did is that we would call – after we got 50 percent of our quota, we called the dealers that had reported landings of menhaden for the last three years. We got those people; but apparently we had a bunch of people who had reported last time that had never reported.

I think the work got around from the fishermen that they needed to report their landings; and so we actually had I think an additional 78,000 pounds I think of landings reported after we made our report. We're still having an issue with reporting. We were calling these folks weekly; but if we didn't know who to call, then we never got the reports in. For example, we had one fisherman that reported to us in April that he landed 55,000 pounds last year; so we have to work on our reporting issue. Does that answer your question?

CHAIRMAN BOYLES: Are there further questions? All right, seeing none, Senator Richard Stuart from the Commonwealth of Virginia; Senator Stuart, welcome to the Menhaden Board. We are glad you're here and welcome to the commission. Your time is valuable and we appreciate you spending it with us. Is there further discussion on the FMP Review? Dave.

MR. DAVID SIMPSON: I wonder if we could just make sure we have a table in here that shows in one place the total landings; so

what was caught under the quota; what was caught as bycatch; and then a total. I understand Table 1 is more an accounting spreadsheet to show performance under the quota management, but maybe somewhere else so that in one place you can find the bottom-line numbers and how they break out by state.

DR. LOUIS B. DANIEL, III: I'm just curious about the bait industry and the demand for bait. Are we seeing a lack of bait; are we seeing a price increase, a price decrease. How have the various implementations impacted the bait particularly for the blue crab fishery and other fisheries that are dependent on it?

MR. KAELIN: I guess I'll take a stab at that. We have been in the menhaden bait fishery at Lund's Fisheries for a number of years. That's a very hot market. I'm not sure about the blue crab fishery so much, Louis, as the lobster industry; but the lobster industry has really grown – I think Stephen can bear this out – to like menhaden.

In fact, the demand for menhaden has increased dramatically and the price has gone up, too, so now we have a scarcity. The prices are pretty strong. The other thing that I happened I think is that last year there were a lot of larger fish that were probably more suitable for that market that weren't caught because the northern states were shut down so early in the season.

New Jersey lost access to 60 percent of the resource in one year, which was about a \$4 million loss to the state of New Jersey and the fishermen that were involved. The result was a lot of smaller fish ended up in that market and better quality. Perhaps more fish that were more in demand were left in the water. It wasn't a particularly good year for the bait fishery up and down the coast.

DR. DANIEL: Just a final follow-up; just thinking multispecies, ecosystems management stuff that I know I argue against all the time; but the South Atlantic Board is discussing a Spot and Croaker Fishery Management Plan. For those folks in the southern states, if there is a size limit put on those, that is going to constrain

our ability to use those as bait; and so menhaden is going to become more and more important in the southern fisheries with the loss of that; and particularly for Virginia and North Carolina.

I think we need to be thinking about the allocation issues that New York was talking about in terms of trying to make sure that we don't disadvantage the coast-wide bait industry. I'm glad to hear that the bait is doing well in the northeast; but at least in North Carolina we're having some difficulties.

MR. RUSSELL DIZE: In the central part of the Bay where I live, they take them in bushels but then they put in boxes, the box that they sell them; and they were selling for like four dollars a bushel or a slab, they call it, the year before; and last year they were seven dollars a slab. The crabber got quite a jolt.

MR. JOHN CLARK: I just wanted to reiterate what Russell said there. From what I'm hearing from the Delaware crabbers; some of them think that this whole plan was a plot to put them out of business in the first place. They have been very upset about the price of bait. I bothered Rob O'Reilly several times to find out what is going on because the vast amount of our bait comes from Virginia. Earlier this year he confirmed that it was going about twenty-six dollars for – I think it was over twenty dollars a box. This was just because it was early in the season; but they said a lot of that was going down south, I believe, instead of being available. The price has definitely gone up a lot; and I know a lot of our crabbers say that they won't even go out if the price doesn't come down a lot.

MR. KAELIN: That is a good point. I think from my perspective we sell in both the lobster industry and also the crawfish fishery, too, so I think the crab industry is kind of caught in the middle because I don't think the crab fishermen have the ability to pay that premium that is there for the lobster

industry and the crawfish industry. It is an issue. I think it's an economic issue for your guys that is probably not the same issue in these other markets.

MR. DOUGLAS E. GROUT: Just to follow up on David Borden's comment earlier; I was wondering if the Bay jurisdictions might be willing in their next annual report to provide that information that he was talking about, the poundage of the directed fishery along with what the landings of the bycatch of menhaden are? Would that be a problem for the three Bay jurisdictions?

MR. O'REILLY: I think I heard to report the landings from both the quota as well as the bycatch; is there more to it than that? I think David Borden was asking more about what different species are involved; is that what Doug is asking?

MR. GROUT: Yes; that is what I was asking. You've reported what you've caught under the bycatch provision; but clearly that is a bycatch and it is a directed fishery at something else or a multispecies fishery – to get what the catch in landings are on those trips where you're using the bycatch exemption of other species other than menhaden.

MR. O'REILLY: I think that would be fine; but I think it would be better to have that type of report for the quota gears as well as those that are in the bycatch. For example, in Virginia for the non-purse seine sector, we have about 11 gear types that have individual quotas. I think it would be important to know what those gear types were harvesting both within a quota; and then if they closed, within the bycatch to get the composite look at all that. That would be my recommendation and not to take away from Doug's request.

MR. GROUT: That would be fine because that's even more additional information; but as long as we can have an idea of the size of the directed fishery, the directed poundage that is being landed under that directed fishery; that is what I was wondering if it would be any problem with the Bay states providing that.

CHAIRMAN BOYLES: I will look to Marty and Lynn and see if you could respond to Doug's question.

MS. FEGLEY: Yes; I don't think that would be a problem. I think it is a really good idea. I'm sitting here trying to think about when the compliance report is due relative to when some of these fish are reported. Certainly, something like striped bass comes in right away; but other fisheries like the spot and croaker and the perch, those are still sitting on monthly reports. The bottom line is I think we could certainly do that. I think it is a great idea. Some of our landings may be just preliminary in nature at the time the compliance report comes in.

MR. GARY: For PRFC's perspective; I don't think it would be a problem either. We're on weekly reporting. I guess I just want guidance in terms of – I think David was asking about species' diversity and to what level. Do you want the actual landings of those species and all species; Doug, is that what you're asking for?

MR. GROUT: Yes; what species are being landed.

MR. GARY: Not a problem from our end.

MR. O'REILLY: I'd recommend broadening this suggestion by Doug and originally by David Borden to bycatch all over, I mean really, to get an idea on it. For example, last meeting the management board spent a lot of time initially looking at the Florida cast net issue and the extra reports and harvesters that were showing up that hadn't been part of the stream in the past; and that developed into not a Florida issue, but that developed into a cast net issue for all states with cast nets.

I know there were some comments that, wait a minute, that's really not a bycatch, but that's where it ended up in bycatch. I mean, I think this should be part of the overall reports for the whole host of states to put

forward just to get a better idea of what is involved here once we move towards the assessment and come out of the assessment.

MR. GROUT: That wouldn't be a problem from my standpoint. I don't mean to pick on the Bay states; but I was looking at where 95 percent of the bycatch was coming from – those bycatch provisions was coming from; and that's where I really wanted to see what it is.

MR. O'REILLY: Well, again, I'd like to hear from other board members on that because the Bay states have different situations for 2013 and probably for 2014 with the landings; so I think Virginia was about 5 percent of the overall bycatch. We did start this out as a state-specific allocation system and everything else. I think it is important for everyone to supply as much information as possible.

MR. BORDEN: Mr. Chairman, I just want to clarify for everybody that I'm not trying to pick on the Chesapeake states at all. Rhode Island had a bycatch of 15,000 pounds; and that was out of the fish trap fishery. That fishery caught probably somewhere between 1.5 and 2 million pounds of other fish while they caught 15,000 pounds of menhaden. There is no question it is totally a bycatch fishery; they can't avoid it. I just want to get that same sense for these other fisheries.

MR. AUGUSTINE: Mr. Chairman, I thought we should be looking for a motion to have the technical committee move forward with what Mr. Borden was talking about. In the meantime, I thought we were really pointed toward approving or disapproving the PRT recommendations; so when you're ready for a motion, I would like to do that and ask for a motion, Mr. Chairman, to address the issues that have just been talked about by Rob O'Reilly and Mr. Borden.

CHAIRMAN BOYLES: Okay, sit tight just for a second, Pat. Russ.

MR. RUSS ALLEN: Mr. Chairman, just to let you know on the Jersey side, as we start to close some of these fisheries on occasion, we don't

have reporting for those fisheries; so we cannot provide that data. That would be impossible for us to do; so if you make a motion like that, Pat, I would definitely have to turn that one down.

MR. WAINE: I don't know that this is really a technical committee task. I think it is more of a plan review team task to work with the states to get this data reported in their compliance reports and be able to come back next year and report on the 2014 fishery with this information unless the board was wanting to see this for 2013.

CHAIRMAN BOYLES: My sense on this issue of bycatch – and, Pat, thank you, we do have several issues here at play – my sense is that there is some desire from the board to characterize the nature of the bycatch fishery and to the degree to which the jurisdictions can do that. Doug, I don't want to put words in your mouth, but I think that's what I heard you say. You're shaking your head in the affirmative. Do I have it correct in terms of what the board would like to see?

DR. DANIEL: Why? I mean, that is my question; what are you going to use that information for? Menhaden tend to be schooling fish; and if you go to a pound net and it is chockablock full of menhaden, you're going to land them; and their trip ticket might say it is all menhaden. The next day you go back and it is mostly flounder with just a couple of menhaden. Unless you're looking at it on a per trip basis, it is going to be difficult to average that out. My question I guess would be to go through exercise; to what end?

MR. GROUT: As a board member, I'm trying to get an idea of what is being defined as a bycatch fishery. I understand the menhaden are going to come in there; the pound nets are going to be fishing for striped bass or fluke whatever. I'm trying to get an idea of what is not on a per trip level, but in the big picture in each jurisdiction when we're using this exemption, this 6,000

pound per trip exemption; what are the other species and how much of the other species are being caught at the same time.

All I'm trying to do is get that piece of information; and I don't care about it for this year. I'm talking about it for next year, from now on, and I was looking for sort of some voluntary compliance with the states that really felt they needed this bycatch provision. It is just information.

CHAIRMAN BOYLES: I'm going to go out on a limb here; you all help me; don't let me get too far out. We've got a 2014 FMP Review that Mike has presented. I think we've talked about that and we've had a lot of new good discussion, a lot of good questions about that. Part of that FMP Review, as was requested by the board back in February we talked about the bycatch issue, which is the next item on the agenda.

If it pleases the board, what I would suggest is that perhaps we use this as a point of departure, let's look at the next action of being an FMP Review and let this lead into what I believe the sense of this next agenda item would be; how do we characterize what is a bycatch fishery? Is that fair? I'm seeing heads nod. Okay, is there any other discussion on the FMP Review? Tom Fote.

MR. THOMAS FOTE: **I make a motion we approve the FMP Report.**

CHAIRMAN BOYLES: Accept the FMP, Tom, and the de minimis requests?

MR. FOTE: Yes.

CHAIRMAN BOYLES: Okay, motion by Tom Fote; second by Pat Augustine. Is there public comment? Yes, sir, come to the mike and identify yourself, please.

MR. PATRICK PAQUETTE: Patrick Paquette, Massachusetts Striped Bass Association. I'm a resident of Cape Cod, Massachusetts, where we still have what we refer to as a weir and you refer to in the Mid-Atlantic and in the Chesapeake Bay as pound nets. A very simple

question; I don't understand why there is bycatch of menhaden in that fishery.

Those fish are easily released alive. We release lots of different species out of our weir alive. We're able to take out what we want to harvest and release what we don't want, what we don't have market for. It is simple question that I'd like to have – I don't need to be answered, but I think that the board should be answered because you're not talking about a few fish versus a few million. When you're talking about millions of pounds of bycatch, I just don't understand why they can't be released. Those aren't dead fish. They're swimming and generally they're pretty healthy.

CHAIRMAN BOYLES: Thank you, Mr. Paquette. Is there any other public comment?

MR. JIM PRICE: My name is Jim Price, President of the Chesapeake Bay Ecological Foundation. I'd like to make a quick comment on the gentleman's concern about pound net fisheries releasing menhaden alive, I guess. In the overall picture I think that is a very insignificant issue that people who are really concerned about predator species should not really dwell much time on since it makes up probably less than 2 percent of the total catch.

Thank you, Mr. Chairman, for the privilege to speak. The Chesapeake Bay Ecological Foundation Predator/Prey Monitoring Program continues to collect data demonstrating that the menhaden population is no longer ecologically sound. Lacking the protection of a minimum size limit, large numbers of immature ages zero and one menhaden are harvested by the purse seine reduction fishery, averaging 38 percent of the reduction fishery landings by number from 2009 to 2013.

During this same time period, mature menhaden, ages three-plus, accounted for only 11 percent of the landings, indicating that the spawning stock is overfished.

CBEF has sent the commission a copy of our study that explains why immediate action is needed to substantially reduce the menhaden purse seine fishery harvest.

The Bay Harvest Cap and the TAC both failed to protect the young forage-sized menhaden, ages zero and one, that are crucial prey for striped bass approximately 12 to 24 inches. CBEF plans to petition the National Marine Fisheries Service to list the Atlantic menhaden as a species of concern.

MR. JIMMY KELLUM: Mr. Chairman, I had two points I wanted to make and now I have three. The first one; we were talking about the prices of bait. This is a fisheries management board. It is not based on the price of fish. It is based on managing fish. Every spring the price of fish goes up. Right now the price of fish has come in half.

That has nothing to do with fisheries management. It is two new companies in the Gulf of Mexico emerging on the bait business. We can't control our catch and control our price both. You have to let us operate in a free market. My second point; the zero to one, I don't know that those numbers are known numbers. Our large fish generally live in the New Jersey Region. Mr. Kaelin can attest to that. If they stop fishing in July, how are going to land larger fish if they are in the northern region? I think some of these things need to be addressed and thought about. This fisheries management based on price and based on reallocation is mistake. It is slippery slope.

MR. JOSEPH GORDON: I was actually hoping to wait until the numbers were accepted, but hopefully nothing will change. My name is Joseph Gordon. I'm speaking on behalf of the Pew Charitable Trust. We want to take this historic moment to thank you all for your contributions to the success of the first year of coast-wide Atlantic menhaden conservation management; particularly Chairman Daniel and Boyles for your leadership, but all of the commissioners at the table today and others who aren't; Bob Beal and the commission's dedicated staff, particularly Mike Waine; and all

the other scientists and advisors who contributed to this achievement.

Creating a plan is important, but following through and achieving your target is even greater accomplishment. We want to particularly thank state managers in this regard. We recognize your job is difficult. Last year some of you had to go home and implement a plan that you voted against; putting in the hard work to create new regulations of reporting systems and explaining it to your constituents.

Some of you who made the vote know it will deliver great benefits to your state; and then you went home and got sued. We recognize these challenges and commend all of you for your courage and perseverance in the implementation of Amendment 2. After over a hundred years of debate about Atlantic menhaden, the commission listened to over a hundred thousand members of the public who commented and took action in December 2012.

The first-year numbers that the board I guess now is just about to approve demonstrates that you have established an effective management system for the largest fishery on the Atlantic Coast. The coast-wide allocation reporting system and biological reference points were all put in place and the overall quota was not exceeded.

This means that the Amendment 2 target of reducing the overall catch by 25 percent compared to 2011 was achieved. We estimate that approximately 300 million more menhaden were left in the Atlantic Ocean to fill their vital ecological role. We're going to leave copies of our first-year report on Atlantic menhaden performance.

Conservation is an investment; and we anticipate that everyone can enjoy the benefits in the near future whether you voted for Amendment 2 or not. Menhaden mature quickly and they're at a fraction of their historic abundance. It is too early to measure the change for many species that

menhaden feed, but we're optimistic and we expect that the benefits of your conservation will be fast, widespread, and enduring for other predator species you manage for recreational and commercial fishermen and businesses and for the Atlantic Coast Ecosystems.

We look forward to working with you as you implement as the scientific recommendations of the upcoming benchmark stock assessment, and we hope you'll set a global standard for the conservation of forage fish and advance the transition to ecosystem-based fisheries management with menhaden. Thank you.

MR. BEN LANDRY: My name is Ben Landry with Omega Protein. Thank you, Mr. Chairman and members, for the opportunity to provide some comments. Since everyone else showed a lot of interest in the bait industry, I thought I would at least come and give you a little bit of update on Omega Protein.

We caught 99.8 percent of our quota, which is I think perfect management to make sure that we're in full compliance. To answer a question earlier what percentage of the episodic fishery that was redistributed, we were given our share of that and we caught it; so roughly 78 percent, but at least the episodic fishery was not wasted.

The notion of allocation or reallocation has been discussed; and a lot of that has been focused on the economics of the bait fishery and what is being lost there. I would also say that there has been tens of millions of dollars lost on the reduction side by this quota; so economic loss is not tied directly to the bait industry and the stakeholders of that fishery.

I would think that any reallocation is simply this board choosing the winners and the losers of this quota as opposed to fisheries management and sound conservation. That is all the comments I have. Thank you. Again, the quota seemed to reduce harvest so certainly there is more fish in the water if that was the goal; but if the goal was to reduce the harvest of one company or one state while we allow other states to increase their harvest, then I think that it was probably

misguided. I would caution against moving towards that in the coming years. Thank you.

MR. SHAUN M. GEHAN: Mr. Chairman, Shaun Gehan, also representing Omega Protein. Just on the discussion about data capture; I think there are good reasons for collecting full information as to what was caught, what was retained by species, by poundage and what was discarded. I think discards is probably the most important because I believe we've heard – and maybe others can correct me – that when a pound net, for instance is pursed out to empty the net, you can't release the fish that are alive. It is not much different than pursing up a purse seine.

The goal ultimately is start moving towards the target and not the threshold. If we're going to do that, what you need to know is total mortality. I'd also point out to the extent that we're talking about bycatch and the commission has a duty to minimize it, knowing when, where on a set-by-set basis what is being caught and what is being released can help states manage their allocations better and minimize bycatch to the extent practicable.

I am sort of surprised to hear Jim Price say it is not an issue; because as it has been pointed out that 90-plus percent of the total bycatch came from the Chesapeake Bay Area, which is ostensibly the area of greatest concern – it is the only place with an independent TAC and a hundred percent of the – well, let's say 99.9 plus percent of the bycatch came from the Upper Bay. I think if the board is going to be consistent, we need to look at the mortality and the fish coming out of that side of the Bay as well as the southern part. Thank you.

CHAIRMAN BOYLES: We will go back to the motion now. We have a motion on the floor to move to approve the 2014 Fishery Management Plan Review for the Atlantic Menhaden and approve de minimis requests for New Hampshire, South Carolina, Georgia, and Florida. The motion was made

by Mr. Fote and seconded by Mr. Augustine. All those in favor of the motion signify by raising your right hand, please; opposed raise your right hand; null votes; abstentions. **That motions carries seventeen for, zero against, zero null, zero abstentions.** Now, that's is Part A.

REVIEW 2013 BYCATCH LANDINGS

CHAIRMAN BOYLES: Part B – and, Doug, I'm going to go back to maybe you – let's go back to the discussion on bycatch. I think where we left off the discussion was a characterization of the bycatch fishery. Can you pick us back up, please?

MR. GROUT: All I was trying to do was to try and get some information for me and hopefully the rest of the commissioners. As policy makers and managers, we have given an exemption of a 6,000 pound bycatch, which will not count towards the quota. This was obviously very important to the Bay states; and what I'm trying to do is to try and get a characterization of these fisheries that are being allowed to land under the bycatch provision here of this plan.

Originally I focused on the Bay states because I was just sort of looking for some voluntary can you just provide that on your next report because they accounted for over 95 percent of the bycatch fishery. If it is important to the board to have that kind of characterization for anybody operating under the bycatch provision; is there a possibility the other states would be able to provide that kind of information.

CHAIRMAN BOYLES: Doug, I'm presuming you're talking about for the 2015 FMP Review?

MR. GROUT: Yes; because we've already approved this.

CHAIRMAN BOYLES: Does the board get a sense of where we're going? We're looking for a characterization to the extent practicable for fisheries operating under the bycatch allowance, what is the nature of the bycatch? Lynn.

MS. FEGLEY: Just to be clear, in my mind I was thinking this would be an annual catch. It wouldn't be of much greater resolution than that; so for the 2015 fishing year we caught – this is the breakdown of species that these gears caught; is that what we're thinking?

CHAIRMAN BOYLES: Yes; but it would be the 2014 fishing year.

MS. FEGLEY: 2014 fishing year; thank you, Mr. Chairman, no problem.

MR. STEPHEN R. TRAIN: I guess I want to echo what Dr. Daniel said. Why? I mean when we sat here and allowed this 6,000 pound bycatch, we all but said you don't need to catch anything else. You just need to say you're trying to catch something else. To me a bycatch was part of another fishery; and it seems like we've put this 6,000 pound number in and said as long as you stay under that; you're okay. Now we want to know why. It wasn't what we allowed so I don't know – I'm all for the numbers; but I don't know after we allowed it, why we want the information on what're doing. We knew what they were doing.

MR. O'REILLY: Well, I share that sentiment; and I think that such time and effort was spent on getting the 20 percent reduction back in December of 2012, that other details certainly didn't get as much attention and now they're starting to get attention later on. Virginia would be happy to provide the type of species' composition. I don't think an annual basis does much there.

Certainly, we would want the other states up on the board to participate as well. I do think the variability is such that Dr. Daniel was mentioning that it can be very difficult to really know what you have as a lump sum of species' composition when the variability can be a weekly variability if not sooner once you get into the sciaenids. It is a detail that adds on to all the other ones that we do comply with in plans right now with our

compliance plans; and it will probably be built on if the board wants to do it. If the rest of the board members who are listed up there are willing; Virginia would be willing to do it. There are just great reservations about where we go from there.

CHAIRMAN BOYLES: Thank you, Rob; and 1.2 percent of the catch is what we're talking about of this year. Everybody keep that in mind. Ritchie.

MR. G. RITCHIE WHITE: I think Doug is asking for a voluntary situation. A state can do it; a state doesn't have to do it. From my perspective, I think it makes sense for all the states that are having bycatch to provide this information because obviously at some point in the future we're going to review the 6,000 pound bycatch. This is information that I think could help the argument to maintain it. That would be my idea.

MR. CLARK: Mr. Chairman, full disclosure, I think Delaware was the only state that actually our bycatch landings exceeded our actual quota; but we could definitely report what other things we're landing in our gill nets. I believe our TAC was filled in mid-May last year; so most of what is available during the summer in Delaware Bay is our fish that are going to be caught in the same meshes that they use for targeting menhaden. We can definitely report what else they're catching during the bycatch period.

MR. DIZE: Mr. Chairman, as you said, we're talking about such a small amount and to do so much reporting on; out of 167 million metric tons, we're talking about – of the total catch, we're talking about a bycatch of around 1 percent. I mean, should we even be spending time doing this? Remember, the bycatch numbers from last year were at 12,000. This year we will be at 6,000. That we're even spending time on it doesn't make sense.

CHAIRMAN BOYLES: By the way, I need to apologize, perhaps. I'm not trying to minimize anyone's particular interest. I think it is fair to say every fish is important. I think what we're trying to do is be very judicious in how we

spend our time. If I have offended anyone, I apologize.

DR. DANIEL: No offense taken. I get in trouble every time I mention price. It doesn't seem to matter in what context; but it does have a bearing on this fishery particularly. What we're seeing is that the lack of bait is causing the price to go up; and what does that do? That results in more people going after them.

That is a fisheries management issue; and so I don't know what the expectation is for this bycatch fishery. It might develop more. I suspect that it is going to if those fish get to be worth fifty cents a pound. We've got ten cents a pound dogfish fisheries. The 6,000 pounds of menhaden at fifty cents a pound; that is pretty good fishing. What does bycatch mean?

They didn't set those pound nets for menhaden; they set them for flounder. It is possible that it is all menhaden. Yes, you can release them, but why would you release them if you can keep 6,000 pounds? That doesn't make any sense financially. It is going to open up a bunch – I think it is going to open up a bunch of cans of worms here; because the next part of the debate is going to be, okay, well, what percentage can menhaden make up of the catch? Are we going to do a 50/50 rule? Is it going to be 20 percent can be menhaden? We're going to be doing all this a posteriori the plan development, which is really not a good way to do business.

CHAIRMAN BOYLES: I will say from my perspective here, sitting in this Chair, I think we all have to focus on the fact that the eye on the prize is the stock assessment that we hope will inform all of our decisions and all of our interests with this. With that, I thank you all for your discussion. I'm going to turn it over to Mike just make sure we've got everybody on the same page with where we go with this discussion of bycatch with respect to the reports for the 2014 fishing

year. Mike, can you recap that for us, please?

MR. WAINE: What we will do is work with the plan review team; and for the fisheries that land bycatch, we will characterize the other species that they are landing both as the bycatch fishery and under the quota as Rob requested.

CHAIRMAN BOYLES: Is there further discussion? Okay, thank you for your discussion and public comments on this. Next we will move to the technical committee report.

TECHNICAL COMMITTEE REPORT

DR. GENEVIEVE M. NESSLAGE: I'm pleased to report that the SAS and the TC have been working diligently over the last few months and since you all last met to try and prepare ourselves for the upcoming assessment workshop, which will be held in Beaufort June 2nd to 5th. We have identified and completed the preliminary – I should say most finalized the workups of most of the data sources and held a total, since we began this whole process, of eight webinars and four in-person meetings. We've been doing quite a bit of work.

To provide a little bit more detail, the work that we have conducted since the January data workshop has largely focused on finalizing those bait landings, which you just took a close look at. Also, we've finalized our estimates of many of the life history parameters, including weight and maturity, fecundity at age and growth.

We've also spent a lot of time carefully looking at the fishery-dependent and independent indices that are available all along the coast and tried to estimate the spatial extent of each of those surveys so that we can statistically combine them into meaningful regional and coast-wide combined indices for use in the model.

Altogether we've identified 16 juvenile indices, which is up from I think 6 or 7 that we used in the last assessment; and a total – and this is new – of 12 adult indices spanning Connecticut to Georgia, which is a big change from the last assessment where all we had was the fishery-

dependent PRFC Index. That is a very promising development.

The other thing I think I'm safe to say is that the indices are showing a lot of regional congruence in their trend; so that is also very promising as well. We've also spent a good deal of time looking at the historical tagging data that was re-key punched and conducting some analyses based on that to try and get at alternative estimates of natural mortality and migration rates that could inform a spatially explicit model.

We've also spent quite a bit of time discussing how we might build that information into our models now or in the future. I'll talk a little bit more about natural mortality in the next slide. We've obviously spent a good deal of time working on trying to update and revise the MS-VPA. We've also looked at the tagging estimates of M and other life history estimates; and we still have not finalized that. I'll discuss that, as I mentioned in the next slide; but we're hoping to have that finished up or at least have our plan in place by next week when the MS-VPA group meets again.

We've also spent a bit of time updating each other on progress made for other stock assessment models. We plan to use the Beaufort Assessment Model, but it had quite a few updates and modifications to expand the spatial component of the capabilities of that model. We're also bringing, hopefully, if I can get things to work in the next few weeks, a version of stock synthesis to the table as a complementary model that would hopefully collaborate the Beaufort Model and just provide some ancillary information for the SAS to consider.

I mentioned natural mortality is still an outstanding issue for us. It is something that we'd like to get right and is very important. The Ecological Reference Point Working Group that you've heard about actually has two tasks that they were working on right now. The first is obviously to update and

revise the MS-VPA in preparation for the Atlantic Menhaden Assessment.

The last bullet here indicates that we have run into some problems I've mentioned at the last update report. When we went back to incorporate all the most recent diet and predator and prey information, we had to, because we've added new years of data, update the overlap, both spatial and temporal aspects of the prey preference of the predators for the prey, depending on where they are along the coast and what time of year they overlap; and in doing so we ran into some issues that needed to be dealt.

It has been a long time since we've done that; and so it has been taking a little bit longer than we like. The last I heard Mike Celestino from New Jersey has been doing a lot of work on troubleshooting this model; and we are thankful for that. It sounds like we may have most of our issues settled. We'll know for sure by the end of next week, and please keep your fingers crossed. The results of all that will be finalized, like I said, hopefully next week in preparation for the June assessment workshop. At the same time, the BERP Working Group has held a couple of conference calls to try and work on TOR 7 for the Atlantic Menhaden Benchmark Assessment; and that involves developing an Ecological Reference Point Plan and some preliminary analyses that the peer review panel could vet and provide constructive criticism in preparation for our moving forward with new reference points for menhaden that would incorporate their role as forage fish in the ecosystem.

We've identified a suite of potential ideas that we'd like to explore; and at our June Technical Committee Meeting Week that working group will meet again to hash out and explore some preliminary analyses and see what we think might be the most useful methods to bring forward to the peer review panel and then ultimately the technical committee and the board.

The next steps, as I've mentioned we're having our assessment workshop for the menhaden benchmark in the beginning of June. The middle of June the Ecological Reference Points

Working Group will meet during the technical committee meeting week. That's I believe the third week of June. We will continue to have more conference calls and potential meetings of the Atlantic Menhaden SAS and then technical committee.

In the fall the technical committee will meet to approve the final report. We expect to have the report peer reviewed in December at SEDAR 40 and then hopefully be delivering the final results to the February Winter Meeting in 2015. That's my report. Thank you.

CHAIRMAN BOYLES: Are there any questions for Genny? Bill Goldsborough.

MR. WILLIAM J. GOLDSBOROUGH: Mr. Chairman, this is really more a request to you for Genny on behalf of the Ecological Reference Point Workgroup, which I really appreciate her reporting on as well as the technical committee's deliberations, as it has great relevance to this board. I guess technically it is a workgroup of the Policy Board – I'm not sure – but, of course, that board met yesterday.

We received a report from Ken Hinman earlier that looks like it would be very useful for the BERP Workgroup; and I wonder if we could refer this to them for their information. It looks like it has got a lot of very useful references and not to mention the analysis that may be helpful to them in their deliberations.

CHAIRMAN BOYLES: Without objection; we'll do that. Are there further questions or comments? Rob.

MR. O'REILLY: Genny, are the candidate models still there; is it open season still? I heard you say the Stock Synthesis Model is going to be looked at.

DR. NESSLAGE: It is open season on models. Everything is still on the table at this point. We haven't begun the assessment workshop. The two candidate models that

are going to be brought forward are various versions of the Beaufort Assessment Model; and again, if I can get it working, the Stock Synthesis.

We have not received any other alternative analyses from the public if that's what you're asking; but if any of the SAS members brought something forward, we would definitely consider it. I would like to know soon so we can get them on the agenda; but those are the main models that we will be considering, yes.

CHAIRMAN BOYLES: Are there further questions? Bob.

MR. BALLOU: Not a question; just a comment and really for the edification of any board members who were not here for yesterday's Policy Board Meeting, as well as members of the audience, I think it is helpful to note that the Committee on Economics and Social Science has been directed to look at menhaden as a case study and to report out on that, if I'm not mistaken, in concert with the stock assessment report to help inform the management board in moving forward in I guess 2015 and thereafter.

I just think it is a nice confluence, if you will, of the science and the economics and social science work that is going to be done. If I'm not mistaken, we're in sync on those two and are likely to be getting a report from the CESS in concert with this assessment. If I'm wrong on that, I look to Toni to clarify. Thank you.

MS. TONI KERNS: I'm not sure if we'll get the CESS Report in concert with the stock assessment report; but CESS will be reporting back to the Policy Board in a timeframe in which they can get information back to the Policy Board and the Menhaden Board at the August meeting; and then we can get back to you then. I think that we may be asking for a little bit too advanced speed to have information back to us in December/January when that stock assessment is being peer reviewed.

CHAIRMAN BOYLES: Are there further questions for Genny? We appreciate it, Genny.

REVIEW ADVISORY PANEL MEMBERSHIP

The next item on the agenda is an agenda item that I'm not sure that we're ready to act on anything. Mike, do you want to take that?

MR. WAINE: We weren't able to get the nomination in time; so when we do get the nomination, we can put it on the agenda for our next meeting. Thanks.

MR. KAELIN: Mike, where are we on that issue; can you expand on that a little bit in terms of the membership of the AP and the repopulation of it. It has been so long since we've met as a group; I'm not really sure where you are.

MR. WAINE: Jeff, as you know, the advisory panel is quite active and was very active through the Amendment 2 process. We haven't met in some time, but I do believe that committee has a very active membership. We are continually evaluating participation and everything; and as you know, Bill Windley stepped down and you are now our Chair; so we can work together and make sure that advisory panel has adequate membership.

ELECTION OF VICE-CHAIR

CHAIRMAN BOYLES: The next item on the agenda is elect a vice-chair. Mr. Abbott.

MR. DENNIS ABBOTT: Mr. Chairman, I'd like to nominate the fine gentleman from Rhode Island, Mr. Robert Ballou, to fill the vacant position of vice-chairman of the Atlantic Menhaden Management Board.

CHAIRMAN BOYLES: Okay, Bob Ballou has been nominated. Pat Augustine.

MR. AUGUSTINE: Mr. Chairman, I would hope that we would accept that nomination and close nominations to further action and cast one vote on behalf of Mr. Ballou.

CHAIRMAN BOYLES: All right, there is a motion and a second. Is there any objection to that motion? Seeing none; Bob Ballou is elected vice-chair. Bob, congratulations and thank you.

ADJOURNMENT

CHAIRMAN BOYLES: Are there any other items on the Menhaden Board Agenda? Seeing none; Mr. Chairman, I would yield the next one hour and twenty-seven minutes back to the commission. Thank you, all, for your great conversation and discussion; very good feedback. I thank the members of the public for being here. The Menhaden Board is adjourned.

(Whereupon, the meeting was adjourned at 11:25 o'clock a.m., May 15, 2014.)