PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

ATLANTIC MENHADEN MANAGEMENT BOARD

The Westin Crystal City
Arlington, Virginia
February 7, 2019

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Dennis Abbott, NH, proxy for Sen. Watters (LA)
Nichola Meserve, MA, Administrative proxy (Chair)
Raymond Kane, MA (GA)
Jason McNamee, RI (AA)
Bob Ballou, RI, Administrative proxy
David Borden, RI (GA)
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Justin Davis, CT (AA)
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Jim Gilmore, NY (AA)
Maureen Davidson, NY, Administrative proxy
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Heather Corbett, NJ, proxy for L. Herrighty (AA)
Russ Allen, NJ, proxy for T. Fote (GA)
Adam Nowalsky, NJ, proxy for Sen. Andrzejczak (LA)
Andy Shiels, PA, proxy for T. Schaeffer (AA)
Loren Lustig, PA (GA)
Roy Miller, DE (GA)
John Clark, DE, proxy for D. Saveikis (AA)
Craig Pugh, DE, proxy for Rep. Carson (LA)
Dave Blazer, MD (AA)
Russell Dize, MD (GA)
Allison Colden, MD, proxy for Del. Stein (LA)
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Bryan Plumlee, VA (GA)
Rob O'Reilly, VA, Administrative proxy
Steve Murphey, NC (AA)
Chris Batsavage, NC, Administrative Proxy
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Mike Blanton, NC, proxy for Rep. Steinburg (LA)
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Spud Woodward, GA (GA)
Doug Haymans, GA (AA)
Jim Estes, FL, proxy for J. McCawley (AA)
Martin Gary, PRFC
Derek Orner, NMFS
Mike Millard, USFWS

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

Ex-Officio Members

Jeff Kaelin, Advisory Panel Chair

Staff

Bob Beal
Toni Kerns
Max Appelman
Jessica Kuesel
Katie Drew

Guests

Karl Blankenship, Bay Journal
Jordan Brown, Saving Seafood
Josey Cline, ASA
Pat Geer, VMRC
Matt Cieri, ME DMR
Jeff Deem, VMRC
Monty Deihl, Omega Protein
Michelle Duval, MAFMC Contr.
Lynn Fegley, MD DNR
David Frulla, KDW
Shaun Gehan, Omega Protein
Joseph Gordon, PEW
Zach Greenberg, PEW
Ken Hastings, Mason Springs Cons.
Sarah Heil, NMFS
Pete Himchak, Omega Protein
Aaron Kornbluth, PEW Trusts
Ben Landry, Omega Protein
Arnold Leo, E. Hampton, NY
Thomas Lilly, Salisbury, MD
Chip Lynch, NOAA
Dan McKiernan, MA DMF
Chris Moore, CBF
Mike Millard, USFWS
Ed O'Brien, MD, Adm. Proxy
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Nick Popoff, ME DMR
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Jack Travelstead, CCA
Bob Vanasse, Saving Seafood
Mike Waine, ASA
Kevin Wark, Orstal, GSSA
Kate Wilke, TNC

The Atlantic Menhaden Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia; Thursday, February 7, 2018, and was called to order at 8:00 o'clock a.m. by Chairman Nichola Meserve.

CALL TO ORDER

CHAIRMAN NICHOLA MESERVE: Meeting in Session. Are there any modifications to the agenda this morning?

APPROVAL OF AGENDA

CHAIRMAN MESERVE: The only thing I would note is that I do not plan to give half an hour worth of introductory remarks before moving on to the next item. Small typo there; so seeing none, we'll consider the agenda approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN MESERVE: Next are the proceedings from our August, 2018 meeting. Are there any modifications? One more note from me on that. On Page 15 it suggests that I offered Derek Orner one more trauma at the microphone. While it can feel that way sometimes; I think I meant turn at the microphone. If Max can make that correction, if there is anything else we'll consider those approved as well.

PUBLIC COMMENT

CHAIRMAN MESERVE: Moving on to public comment, is there anyone in the audience that would like to make a comment on an item that is not on the agenda this morning? Seeing none; the sign in sheet is also empty.

PROGRESS UPDATE ON THE MENHADEN STOCK ASSESSMENT TIMELINE

CHAIRMAN MESERVE: We will move on to a Progress Update on the Menhaden Stock Assessment timeline. This was added to the agenda; so we could get an update on primarily whether or not the federal shutdown has had an impact on the timeline for the stock assessment. We'll turn to Katie Drew for that.

DR. KIRSTEN ANSTEAD: I'm actually going to update you on the single species assessment first. The government shutdown did happen during our main modeling time; and our lead modeler is Amy Schuler from NOAA; so that was unfortunate. But we hope to still come in on time. She's going to work really hard for I guess the next week; and then we'll cross our fingers.

If there is another shutdown that could delay our timeline, but for now we're still on track. We have a modeling workshop in April; and we will have, we hope, a full base run of BAM to review and talk about and start talking about some sensitivity runs. We're doing pretty well in staying on our timeline for the single-species benchmark.

DR. KATIE DREW: The story is the same with the Ecological Reference Point Group. We do rely on some federal data and federal partners as part of that assessment workgroup; but we remain on track. However, if the government is shut down again for any length of time that may end up pushing us back. The SEDAR schedule is still the same for us; so we will have the review the first week of November. But again, any kind of delays or shutdowns further may also impact the SEDARs ability to get us on the review schedule with that. So far so good; but we'll see.

CHAIRMAN MESERVE: Are there any questions from the Board about the timeline or the assessment? Seeing none; that's good news. Thank you both for that update.

REVIEW SYNTHESIS OF SCIENTIFIC FINDINGS OF ATLANTIC MENHADEN'S ROLE IN THE CHESAPEAKE BAY ECOSYSTEM

CHAIRMAN MESERVE: And we will move on to Agenda Item 5, to review a synthesis of

scientific findings of Atlantic menhaden's role in the Chesapeake Bay ecosystem.

Katie Drew prepared a document, which was in your briefing materials. That document clearly states that this is not a product of the ERP or the assessment. It was a result of our last couple meetings; and an ASMFC leadership request to summarize our current knowledge of menhaden's ecological role in the Bay that's going to help frame the next discussion on the agenda related to the Bay cap and potential of noncompliance with that.

I believe the request does reflect some comments from NOAA General Counsel at the last meeting; that put down the need for the ASMFC to develop the record of how failure to implement the cap would be a conservation risk for the species. Katie will give us a presentation and we'll move on from there.

DR. DREW: Our Chair did give us the background; so I'm just going to skip quickly over this slide. Just to point out again, we want to emphasize that this was conducted by ASMFC staff; and it's not a product of the TC, the SAS, or the ERP Workgroup, because they are in the middle of this assessment right now, and we didn't want to burden them with what is essentially a review of the existing literature.

We looked at things that went into the background of the last benchmark assessment and Amendment 3; as things that the Board has seen before, but obviously in a much larger format. Rather than making you guys read several thousand pages of assessment and management documents; we tried to boil some of this existing literature down into something more comprehensive.

Again, it doesn't reflect the current ongoing work of the ERP group, which is still on track for that 2019 Benchmark Assessment. Kind of to frame the issue, I just wanted to give you guys a quick overview of the Bay cap; and point out that sort of the impetus for this cap development was really the fact that through the late 1990s, in fact even up to today, we've seen the reduction plants closing along the Atlantic coast, and the number of vessels in the reduction fleet declining.

What that resulted in is kind of a concentration of effort in the Chesapeake Bay area. You got overall landings declined both in the Bay and in the coast. But the overall proportion of landings coming from the Bay was increasing. That led to concerns about this concept of localized depletion within that Bay that even if we're taking a sustainable amount on the coast, are we taking too much from one specific area?

In 2005 through Addendum II, we implemented this Bay cap; a cap on the removals of Atlantic menhaden from the Bay, specifically for reduction. That cap site has varied over time. As it was originally implemented in 2006 that first year of actual implementation, it was about 109,000 metric tons based on landings from 2001 to 2005. In 2013, when the coast took a cut in response to the assessment that Bay cap was also reduced to 87,000 metric tons, and in 2018 with Amendment 3, it went down to 51,000 metric tons; which was about the average of landings from 2012 to 2016. Reduction landings from the Bay have not really exceeded 51,000 metric tons since 2012; even under that higher cap from 2013 to 2018.

The question is in a sense of what the Board wanted to get some information on is what is menhaden's role in the ecosystem; and what does that say about an appropriate level of removals from the Bay? What' I'm going to review today are some items that the Board in Amendment 2 identified as potential research areas that could help you figure out if localized depletion is occurring.

In order to do that some of the things we need to understand are menhaden recruitment dynamics, how are they getting into the Bay? What is Menhaden's role sort of as a consumer of production; and what is menhaden's role as

forage within the Bay? I'm going to briefly go over all of these topics.

Obviously again, this is something you could do multiple dissertations on; so we're trying to boil it down to some quick key talking points here, rather than really get into the depth of what this all means. To start out with recruitment, as you all know Atlantic menhaden based on genetic studies are a single stock.

Unlike a lot of our species, which spawn in the bays and estuaries that act as nursery areas; Atlantic menhaden spawn in the ocean all along the coast as they migrate. As they're moving up and down the coast in the ocean they're spawning; and then those larvae are carried into bays and estuaries, where they settle as new recruits.

What this means is that recruitment to the Bay is driven by a number of different factors; and that includes both large scale climactic factors like the Atlantic Multidecadal Oscillation, where it seems like we get higher recruitment during some phases of this oscillation within Chesapeake Bay, and then during other phases you get higher recruitment in other areas along the coast, and lower recruitment within the Bay.

But you also get annual variability in the ocean currents that bring those larvae into the Bay; as well as water conditions within the Bay, the abundance of plankton for them to feed on within the Bay, and so forth. Obviously coastwide SSB also is a factor here. You need some kind of SSB out there to produce recruitment.

However, the relationship overall between SSB and recruitment is weak; so that these environmental factors are playing a significant role in getting recruitment into the Bay, as long as you have some kind of recruitment fecundity along the coast. As larvae, menhaden are really feeding on zooplankton; but then transition over to be filter feeders, feeding on phytoplankton in the Bay.

As consumers, some of the modeling work that's been done suggests that they can reduce the extent of algal blooms by feeding on those algal blooms; but they're not really removing nitrogen from the Bay, sort of in the net, in overall. That is they excrete a lot of that nitrogen back into the Bay; and they also themselves are consumed by predators within the Bay who return that nitrogen to the Bay. They're not really a way to get nitrogen out of the Bay; if that's a concern. Obviously a lot of our concern for menhaden is focused on their role as prey, as forage.

There have been extensive studies on fish diets within the Chesapeake Bay; both short term studies and long term monitoring programs like NEMAP and CHESMAP. When you go through this literature, it is difficult to directly compare across studies; because they occur in different years, in different seasons.

They cover different age ranges and focus on different predators; and they even use different metrics to estimate diet composition, and how much is actually being consumed. To just take one study and say well this is the percentage of menhaden in the diet here; and you compare it to another study and it looks completely different.

The menhaden TC actually did a tremendous amount of work synthesizing all of those existing diet data for Atlantic menhaden; by season and region for several key predators for the last benchmark assessment. I'm pulling on their work and showing you their work here; rather than going through an exhaustive literature review, because that has essentially already been done.

I'm showing you right now the percent by weight of menhaden and striped bass diet that the menhaden TC developed by season and age class; from data pooled over multiple different

studies, as well as ongoing monitoring programs like the Northeast Fisheries Science Center database, CHESMAP and NEMAP.

What I want you to kind of take away from this graph, even if you can't read the actual numbers is that the proportion of menhaden in the diet is extremely variable over time, and also over age classes. You can see it ranges from almost no contributions to the youngest ages across seasons, to making up a large proportion of the diet in certain seasons for the oldest age classes.

There is a tremendous amount of variability within a predator's diet; and this is pooled over time. It's not even getting into some of the variability you get as menhaden abundance changes over time. There is a lot of variability in the prevalence of menhaden within diets. This is for striped bass. We have a couple of other species within your briefing materials.

Obviously I just focused on kind of the key predators; in terms of fin fish species. But you see similar patterns for different fin fish species; and you see to a certain extent similar patterns for other non-fish predators. But unfortunately the diet studies of non-fish predators within Chesapeake Bay are much less extensive.

It's a lot harder to justify capturing a bald eagle and cutting its stomach open; then it is to capture a striped bass and take a look. There has been some work on predator species within the Bay; for example, there was a thesis on bald eagle diets within the Bay, and a lot of the fish diets are based on sitting there and watching what's being brought back to the nest or looking at droppings, and things like that in the nest itself. The bald eagles for example; they found that you had high prevalence in the summer, so they were eating predominantly fish in the summer, and most of that fish was menhaden and gizzard shad. Whereas in the winter you had a very low occurrence of fish; mostly it was carrion that they were eating. The menhaden is important in the summer; but not in the winter. For osprey, the menhaden was important when you are in the high salinity sites; whereas for menhaden that are nesting in the lower salinity regions of the Chesapeake Bay, you had a lot more gizzard shad and almost no menhaden in the diets.

There is a question of availability and access as well; in terms of trying to assess how important the menhaden are in various diets. Overall what we can kind of take away from some of this is that Atlantic menhaden can make up a significant proportion of many predators diets for specific seasons, for specific size and age classes, and even for specific locations within the Bay.

There is a tremendous amount of variability; and even if you probably averaged it, it may be lower or higher across everything. But in certain seasons, certain age classes, they are very important. The other thing to note is that the prevalence of Atlantic menhaden in the diet does change depending on how abundant menhaden are.

Studies that occurred during periods of high menhaden abundance show a much higher prevalence of menhaden in the diet than studies that occurred during periods of lower menhaden abundance. When menhaden are there the predators are capable of consuming them. When they're not there, they switch over to other prey items.

We know they are an important part of the diet; but what does that say about the impact of reduced menhaden abundance on predator populations? I think that is unfortunately the big question that we're still struggling to deal with. This is the question that the ERP Workgroup is right now trying to deal with on a larger, coastwide scale.

Modeling work does provide estimates of predatory demand. You can do that for one or more predators within the Bay; to say striped bass need this amount of menhaden within the

Bay, based on the population size that we're estimating. But there are no estimates of menhaden abundance specifically within the Bay.

Our assessment model is a coastwide model. We can't say how much are in the Bay in any given year; compared to how much are on the coast. As a result, we don't have a way to measure whether those estimates of single species or multispecies predatory demand can be met by what's available in the Bay.

We can look and say, so we've seen some negative population metrics that you can correlate with low menhaden abundance for some species, For example, things like a current outbreak of mycobacteriosis in striped bass within the Bay has been linked to lower menhaden abundance and higher striped bass abundance.

There is some hypothesis that the increasing natural mortality we're seeing in weakfish may be linked to declining levels of menhaden abundance in the Bay; that if you look at population growth rates for osprey over time, you see slightly lower growth rates during periods of lower menhaden abundance than you see when you have periods of higher menhaden abundance. But the flip side of this is this is an incredibly complicated system. There are other factors that are linked to these negative population metrics. This increased mycobacteriosis prevalence has also been associated with warmer water temperatures and poorer water condition within the Chesapeake Bay. We know environmental factors and shrimp trawl bycatch may also be contributing to weakfish population declines.

The osprey population growth rates are actually higher in low salinity areas; where you don't see as much menhaden in the diet as in the higher salinity areas, as well as being driven by again, environmental factors and even the availability of nesting sites are going to impact the ability of that population to grow.

Overall, what we can say about this is that the Chesapeake Bay is an incredibly complex ecosystem; both in terms of the food web, and then how that is interacting with a changing environment, and the population dynamics of all of these species. We can't prove, at this point we can't say lower levels of menhaden are directly causing these negative population consequences that we're seeing in some of our predators.

But the flip side of that is we also can't say they're unrelated. It probably is a combination of all of these factors that are driving the dynamics of this system. We can say that recruitment to Chesapeake Bay does not appear to be correlated with the abundance of Age 2 and Age 3 menhaden within the Bay.

As long as we have favorable environmental conditions, and favorable coastwide fecundity, we can get recruitment to the Bay. Depletion within the Bay is not going to keep the Bay depleted; but we need that coastwide fecundity and coastwide environmental conditions to remain favorable to continue to supply the Bay.

From a single species perspective, which is a little jarring, but just to point out that when we're deciding how much fecundity is favorable coastwide, and how that catch is impacting that level of abundance or fecundity. The projections we used in the single species model are done with the assumption that the proportion of removals from the Bay is going to stay at their current levels, because the selectivity between the Bay and between the more northern reductions fleets is different.

The Bay has a higher proportion of smaller fish; compared to the more northern regions, which have a higher proportion of larger fish in the catch. Even if the total population removals, the total coastwide quota is not exceeded, the having more or less removals from the Bay can impact the effect of those removals on the overall population, because the overall selectivity pattern will be different from the

assumptions that we used when we did these projections.

Overall there is no current estimate of menhaden abundance within the Bay; and there is no quantitative determination of what an appropriate depletion threshold is, either within the Bay or along the coast. Again, this is what the ERP Workgroup is trying to do on a coastwide level is come up with this hard number.

We don't' have a quantitative determination of whether or not localized depletion is occurring. The Board's decision on this is going to have to come from a more qualitative assessment of what we know about the ecosystem and the complexity, and the role of menhaden within that larger overall ecosystem. I'm going to pause here and take specific questions about anything I've presented today. But I think there are also the larger questions, maybe more Board of management decision questions, in terms of how you interpret the extreme body of evidence that we have here.

CHAIRMAN MESERVE: That's very helpful to have that all put together in a more easily digestible format for the Board. I'll turn to questions; and I see Ritchie White's hand first.

MR. G. RITCHIE WHITE: Katie, seemingly the spawning stock biomass of menhaden seems to be moving north. I'm wondering whether that could affect recruitment in Chesapeake Bay. If they're spawning farther to the north in the ocean, then might that settle in to the north of Chesapeake Bay?

DR. DREW: Well we know that is the thing. The adults always move further north. The fact that we're seeing more of them to the north may just mean we're seeing more of a population expansion; rather than that the population is itself moving further north. I think it's probably less likely of a function.

Well it is where they're spawning; but also then is the current environmental climate favorable for bringing those larvae into the Bay, versus are they spawning down here and they're just not making it into the Bay at the same rate as they're making it into the bays and estuaries further north, which may be more of a function of those larger, climactic events rather than where they're spawning?

CHAIRMAN MESERVE: Andy Shiels.

MR. ANDREW SHIELS: Katie, could you speak to the energetic of menhaden; if you're able to do that. For instance, not all forage is created equal. If you deplete the highest quality forage, they will eat whatever is left; which I think is what was clear in one of your statements. Can you give us any sort of sense on the quality of menhaden as forage; compared to other forage that might be available in the Bay?

DR. DREW: Sure, I think menhaden are definitely high on the favorability list; both for their own internal energetic components, but also because they're more of a soft rayed fish, rather than some of the bonier fish that are harder to consume. Some studies do suggest that even if the, I think it was done with striped bass, comparing sort of the energetic content of diets across different time periods, even if you still are getting full stomachs, depending on the makeup of those, you may get better quality nutrition; depending on if you have more menhaden in the diet, compared to some of the other species. That is certainly something to keep in mind; I think as well as sort of the age range or the size range of what's available to the fish, and what the fish can actually eat. Whereas the birds and the largest of the fin fish predators can eat those very large menhaden; but a lot of the focus is also on those small Age 0 and Age 1 menhaden, so if those are abundant that is better for the population as well.

CHAIRMAN MESERVE: John Clark.

MR. JOHN CLARK: Thanks for the presentation, Katie. Kind of a follow up on the same thing, I was wondering if any of the studies you looked at had the condition factor of striped bass under different diets. I know that we've been looking at the stomach contents of striped bass caught in the recreational fishery in lower Delaware Bay for about the past ten years.

When they can get bunker they've always got a higher condition factor. I remember one year in particular the top prey item was lady crabs. The condition factor was around 0.9, whereas when they get the bunker like your chart showed there, much higher condition factor. It makes sense that they are loading up before the spawning season too.

DR. DREW: Yes there is not as much. I think that is one of the things we would definitely want to implement in terms of a monitoring program is trying to associate body condition with what is being consumed. Definitely some of the studies seem to be you get better body condition when you have more abundant menhaden. But there can be a lot of other factors that are also contributing to the ability to put on or retain weight, in prey as well. But it is certainly something that looks like one of the correlations there.

CHAIRMAN MESERVE: Allison Colden.

DR. ALLISON COLDEN: Katie, could you remind me what was the estimate of the contribution to the coastwide stock that comes from the Bay?

DR. DREW: It's hard to tell exactly. We do have some otolith microchemistry data that suggested it was about 30 to 40 percent of the exploitable menhaden on the coast were coming from the Chesapeake Bay when those studies were conducted. Likely that was something that would provide change over time; depending on the strength of recruitment in those various regions. But it was about 30 to 40 percent when we did the study.

DR. COLDEN: You mention that there wasn't a strong correlation between the Age 2s and the Age 3s within the Bay in recruitment; which kind of makes sense. But obviously those are going to go on to contribute to that total coastwide fecundity that you were saying is driving that.

DR. DREW: Right. You would not want to. I guess the question is does it matter from the population perspective of if you harvest them all in the Bay versus if you harvest them when they're all out on the coast; if you're taking sort of the same amount overall for the population out. I think that is where trying to balance is localized depletion happening, or is it happening on the coastwide scale?

For sure you wouldn't want to deplete the fecundity overall to such a point that the population is going to struggle to produce enough eggs. Does it matter if that removal is coming from the Chesapeake Bay; as long as you preserve say the New Jersey fish in the ocean to spawn? You could still get recruitment back into the Bay; it seems based on the dynamics, as far as we understand the dynamics of recruitment. But you wouldn't want to overall deplete that coastwide spawning stock by removing too much of the whole population.

CHAIRMAN MESERVE: Rob O'Reilly.

MR. ROB O'REILLY: Thank you for the report, Katie. Close to the end of your presentation, maybe three or four slides before the end. There was sort of a cautionary slide about removals, and when the TAC changes if the removals from the Bay can have a greater impact than when you look overall.

I think we'll have to wait for the landings; but we built a conservation plan with Amendment 3. You know the main idea of Amendment 3 for many of us was to look forward to the biological and ecological reference points. Allocation was part of Amendment 3. But when allocation was finished, we're probably going to find that of

the 216,000 metric tons, many of those tons aren't going to be in the landings.

Virginia is frozen at 2017 quota. In the Bay itself Maryland and Potomac River Fisheries Commission were recipients of quite a bit of quota that will be unused; because they are pound net fisheries, they are not going to change. There is quota that is being held for whatever reasons, and there is relinquished quota which couldn't be used as well. When you talk about equal to current levels, are you referring to 2017, or are you referring to the end of Amendment 3?

DR. DREW: Ah, 2016 would be the values that were used in the projections. Again, this is also the cap is specifically for a reduction harvest; you can still have bait harvest that would exceed that cap within the Bay, as well. But it was based on 2016 levels that we did all these calculations.

CHAIRMAN MESERVE: Go ahead, Rob.

MR. O'REILLY: I understand that; but I mean I want everyone to understand that forage is also what we're really looking at as well at the same time, and it should be clear that there is forage that is available that many expected not to be available once we finished Amendment 3. That is by virtue of the way the allocation went.

But again, I think we have to wait for the landings; get a report back, and although the Bay is important, I think overall the forage aspect is something that is very important and moves right into our biological and ecological reference point scenarios that will be developed later.

CHAIRMAN MESERVE: Bob Ballou.

MR. ROBERT BALLOU: Katie, as I'm sure you know Rhode Island has had a menhaden management plan in effect for many years for Narragansett Bay; and it includes both a floor and ceiling biomass levels of menhaden are monitored and the Bay is opened and closed depending on those levels.

The upper level is essentially a cap. Are you familiar with the modeling work that was undertaken; I believe Mark Gibson was the lead, and he may have been assisted by a young whippersnapper named Jason McNamee. I'm not sure. Again, this dates back to the 2000s. Are you familiar with that modeling work; and if so does it have any applicability to your analysis of the Chesapeake Bay situation?

DR. DREW: I'm not familiar with that work enough to say whether or not it would be applicable here. I think we're probably still struggling with the same issue of turning sort of qualitative information into quantitative information; in that sense of what an actual hard cap would be. But I would have to talk to the authors to get more detail on that.

CHAIRMAN MESERVE: Katie, one question. You mentioned of course that we don't have estimates of menhaden in the Bay right now. Could you give the Board a quick update on the RFP for the aerial survey design?

DR. DREW: We did receive, if the Board remembers we've dedicated some funds to doing an aerial survey of the Chesapeake Bay to try to, well dedicated some funds to develop a design for an aerial survey of the Chesapeake Bay, in order to help provide some of this information. We've received two proposals; and they're in the process of being evaluated right now to determine which, if any, we would like to actually fund.

However, I would just like to sort of temper expectations to say the money that we've dedicated is really for just coming up with the design, and potentially a little bit of pilot testing. It wouldn't be for a full aerial survey. Even if we had a full aerial surveys, we would still need several years of data in order to be able to turn that sort of relative abundance concept into an understanding of trends within

the Bay, and how that relates to the larger coastwide assessment.

CHAIRMAN MESERVE: Are there any further questions? Justin Davis.

DR. JUSTIN DAVIS: I'm curious; based on the review of the different diet studies in the Chesapeake Bay, whether you can comment on some of the other species that are important prey items for fish predators, like striped bass and weakfish, which as alluded to earlier they are kind of classic generalist predators when their preferred prey item menhaden isn't there they will go find something else to eat.

I'm thinking about this in the context of the potential problem that localized depletion could cause. I understand we can't prove it is happening. But it doesn't mean that it shouldn't be a concern. Are any of the other prey species that striped bass or weakfish or some of these other fish that they're likely to prey on?

Do those species either support important fisheries or are they of conservation concern? I know up in New England at times there have been concerns about striped bass impacts on winter flounder, lobster, river herring; that kind of thing. I'm wondering if there are some of those same concerns down in the Bay.

DR. DREW: Some of the alternate prey items that they would consume; bay anchovy is a big one. I think certainly the concern with that is that is not something that we monitor or assess at the moment. It is an important forage species as an alternate; but we don't have a good sense of how that population is doing either at the Bay or at the coastwide level as much. We do have some indices for it; but it's not something we monitor or assess. They also consume a lot of invertebrates; including blue crabs at small sizes, as well as shad and river herring, which we have concerns about for their low population levels and things like that and of course juveniles of other species.

Weakfish do show some signs of cannibalism as well on those small, young individuals. For sure the lack of menhaden is going to change how much they are consuming of some of these other things that either we don't monitor; or that do have some relevance for ASMFC or the states, in terms of being important consumption items for humans.

CHAIRMAN MESERVE: John McMurray.

MR. JOHN G. McMURRAY: Given what we've heard about the quality and favorability of menhaden over other baits; and I could speak to that personally, being out on the water. Predators aggregate around menhaden in a way they do not around bay anchovies and other small baits.

My question is; has there been any analysis of what an increase over the 51,000 metric tons cap would mean for striped bass in the context of what we heard yesterday that the stock is overfished and overfishing is occurring, and the Chesapeake Bay is the primary spawning area. Has there been any analysis or just discussion about that?

DR. DREW: No, because essentially that is the work that the ERP group is trying to do right now. I think in terms of the whole ERP assessment is really focused on taking all of this information and turning it into a number; at least at the coastwide level. In terms of saying more than 51,000 are going to have this percent effect on striped bass. We certainly can't say that right now.

CHAIRMAN MESERVE: Follow up.

MR. McMURRAY: Will the ERP group look specifically at the Chesapeake Bay; or are they just doing coastwide, because I would think it would be intuitive that you would look at the biggest producer area on the coast. That's it.

DR. DREW: Right now the model is coastwide. I think there is the ability to have a little bit of

spatial scale in terms of again, the selectivity of these fisheries to say the Bay has this kind of a selectivity and is focused on this size range. But right now we don't have the data to support a fully spatially explicit model; in terms of understanding how menhaden in the Bay are related to menhaden on the coast, and likewise how striped bass in the bay and their predatory demands compare to the coast are falling out.

We may be able to do some follow up work; in the sense of looking at things like that otolith micro chemistry, to say how much of the stock is in the Bay versus on the coast, based on some stuff. But for right now the ERP Workgroup is really a coastwide project.

CHAIRMAN MESERVE: Dave Blazer.

MR. DAVID BLAZER: Katie, thank you and excellent job on the report; a lot of good stuff, and this is a great dialogue this morning. I greatly appreciate it. I want to build I guess a little bit off of John's question related to kind of where do we go from here? The ERP group as you've mentioned is looking at some of the aspects of this more on a coastwide basis. I don't see us resolving some of the questions or issues here.

My question is twofold, I guess. What do we need to do to try and answer this question a little bit more diligently than maybe we have at this point? Is the ERP group going to look at that and make some recommendations specifically; or can we task the TC to do that? I'm just trying to figure out, you know where we're going to resolve this in a year, two years, five years, ten years, and what do we need to be doing now to try and get to that point?

DR. DREW: That is an excellent question; and we will have a number of research recommendations I am sure coming out of this assessment for the long term, in terms of I think for sure this is what the ERP Workgroup is working on now is a coastwide project. But we see this as the first step towards ecosystem management for this species; and for all the species involved, in that as we go forward we would like to build more spatial complexity into this model, because it probably is important for the dynamics on a larger scale.

I think developing then research programs to get at some of this; how are menhaden moving in and out of the Bay and along the coast, and contributing to those things? How does that interact with striped bass and other migratory species; are things we need to collect more data on in the long term. That I think is definitely a five year, a ten year project.

In the short term I think we can look at like I said, some of these things about the proportion of menhaden from the Chesapeake Bay in the exploitable classes. What does that say about and where were they relative to the assessment at that point? When both the single species and the multispecies are done, we can look at kind of changing some of the selectivity assumptions about the fishery.

If the fishery is focused on the smaller ones, more in the Bay, what does that do to the larger overall population? But I think some of this decisions about what is the correct amount of harvest for the Bay, should we be managing the Bay differently than the rest of the coast is going to come down to more of a qualitative assessment of risk on the Board's part. The Board has chosen to be more conservative on a coastwide scale; then the single species model would have suggested.

We set a lower quota than what the single species model would have suggested; in order to preserve on a qualitative level, some of that forage importance. I think that is the kind of conversation the Board has to have about the Bay; as well is are you comfortable making qualitative assessments of risk and levels of harvest from the Bay specifically, versus the coast, in the absence of more concrete, quantitative numbers about what the appropriate level is.

CHAIRMAN MESERVE: I'm not seeing any more hands for questions. We could begin a discussion about this or move to our next agenda item; which I think the two are going to be closely tied together.

CONSIDER POSTPONED MOTION FROM THE AUGUST, 2018 MEETING

CHAIRMAN MESERVE: If the Board is okay, I think we'll do that and move to Item 6, which is to consider a postponed motion From the August, 2018 meeting. This was a motion that was initially introduced at the May, 2018 meeting, postponed then. It was also postponed in August. I'll read it to get us going. Move the Atlantic Menhaden Board recommend to the ISFMP Policy Board that the Commonwealth of Virginia be found out of compliance for not fully and effectively implementing and enforcing Amendment 3 to the Atlantic Menhaden Fishery Management Plan.

If the State does not implement the following measure from Section 4.3.7 (Chesapeake Bay Reduction Fishery Cap) of Amendment 3: The annual total allowable harvest from the Chesapeake Bay by the reduction fishery is limited to no more than 51,000 metric tons; the motion by Mr. Batsavage and seconded by Mr. Estes.

That motion is brought back to the table; it's a little bit of Groundhog Day here for me. I do see your hand, Robert Boyles, but I was hoping if we could maybe turn to Virginia to get any update on legislative action or landings in the Bay to start our discussion.

MR. STEVEN G. BOWMAN: The Commonwealth of Virginia once again through legislation, attempted to have the Virginia Marine Resources Commission manage the menhaden issue in the Commonwealth of Virginia. Measures were sponsored by both the delegate and Senator. Both were heard by Committee, and both failed unanimously in Committee.

Therefore, to come here today and indicate that that is a viable alternative as we thought previously would not be appropriate at this time; nor do I anticipate it based on the history that I've seen throughout, it occurring any time in the near future. I may be wrong; but that is just based on my experience.

As far as the landings; I'm not going to give the specific poundage; because that's not appropriate. But I will tell you this that we very closely, and that motion deals with enforcement, which is somewhat a broad term when you're dealing with this. We monitored the catch from the Bay; data provided by the National Marine Fisheries Service, at every opportunity that that data became available, very closely.

I had Rob do that and provided a report. I will tell you that based on our observations, surveillance by aerial law enforcement that there was not, again the cap was not exceeded, and as a matter of fact it did not come close to being exceeded based on the data that we were provided. Omega was cooperative with us; as well as providing any other data that we requested.

At this juncture, I can just tell you that again now since 2012 through 2018, the cap was not exceeded. We do have also evidence based on dialogue with Omega that they spent a significant time out in the ocean instead of in the Bay; which of course as we all know is beneficial to both their business management plan as well as ecological situation within the Bay. That is pretty much the overall scenario from the Commonwealth; and I'll be glad to answer any questions.

CHAIRMAN MESERVE: Thank you for that update, Steve. Sorry to put you in the hot seat.

MR. BOWMAN: I'm used to it, believe me. I've been down the road, so yes.

CHAIRMAN MESERVE: Robert Boyles.

MR. ROBERT H. BOYLES, JR.: It may not be Groundhog Day, but I would like to take us to the Magic Kingdom, if you could. Roy Disney, Walt's lesser known brother said; "It's not hard to make a decision when you know what your values are." I repeat that for the record. "It's not hard to make a decision when you know what your values are." Later today after this meeting, should we conclude this meeting today; we are going to talk about a strategic plan, and developing a strategic plan for the next five years.

But we are operating under a current Strategic Plan that has words that I would like to remind the Board of; words like cooperative, words like stewardship, phrases like sound science, and important words like honesty, and integrity. I think that I would suggest that those last two really reflect that we are a nation of laws and not a nation of men. With the late Mr. Disney's admonition to us, I would like to make a motion if it pleases the Board and pleases you, Madam Chair.

That motion is; move to postpone indefinitely a recommendation to the ISFMP Policy Board to find the Commonwealth of Virginia out of compliance with Amendment 3 of the Atlantic menhaden fishery management plan, for failure to implement a reduced cap on harvest from the Chesapeake Bay provided the annual catch from the Chesapeake Bay reduction fishery does not exceed that established by Amendment 3. The Board will consider action to modify the Bay Cap after it completes action on ecological-based reference points.

CHAIRMAN MESERVE: Is that a second? Jim Gilmore seconds the motion; further discussion, Robert?

MR. BOYLES: Just one more quote; and this one I can't attribute, but it's not mine. "When one bases his life on principle, 99 percent of his decisions are already made." Thank you.

CHAIRMAN MESERVE: A clarifying question about the motion. If the Bay Cap were exceeded that would be triggering the Board to reconvene and have a discussion about it; not triggering a noncompliance finding, correct?

MR. BOYLES: That's correct, yes Ma'am.

CHAIRMAN MESERVE: Thank you for that clarification; discussion on the motion, Jim Gilmore.

MR. JAMES J. GILMORE: It's always tough following Robert; he just speaks so eloquently. But I just wanted to add to his comments that on this motion and the situation we're in, I think is rather unique. I think that is what maybe Robert was getting at that actually if we just had a simple rule book, and we had black and white decisions on everything, we wouldn't need to sit around the table, everything would be automatic.

But because of the complexity of what we do it gets us into these situations now; the fact that we are going into new territory. We're going to have ecosystem-based management coming up. We're in that crossroads between the old standard of single species going into ecosystem, it makes this very unique. We have a new frontier with old sets of rules. That is what has complicated this quite a bit. I think the best way I can put it is that we've got to get into old fashioned management; maybe it's seat of the pants, maybe it's not following the rules exactly. But I think it's the smart thing to do at this point. I'll just quote Porky Pig; I hope "that's all folks."

CHAIRMAN MESERVE: The quote of the day, thank you. David Borden.

MR. DAVID V. BORDEN: I'll be brief. I support the motion. I would offer the view that I think the Commission representatives from Virginia basically have done due diligence; and made a valid attempt to try to bring the state into compliance. They should be complemented for

that. Although I personally feel that because they haven't adopted the rules they are technically out of compliance.

Where I end up on this is that I basically don't think it's worth fighting over this. We're going to move to ecological reference points in a fairly short period of time. I have no question in my mind that our understanding of the menhaden resources is going to significantly change when we do that. In fact, I could anticipate that the numbers, in terms of regional numbers, gear specific numbers and so forth are all going to change in the future.

Where I end up on this is that I don't think it's worth fighting over; and burdening the Commission and the staff with this. If we're going to change the numbers in a couple of years, let's just get on. Keep the objective of getting the ecological reference points as soon as we can in mind; and not burden anyone with fighting with a noncompliance finding.

CHAIRMAN MESERVE: Steve Bowman.

MR. BOWMAN: Very briefly, Madam Chair. I would just like to take the opportunity to thank everyone that has been, although the vote has not been taken, everyone for the understanding. It has been a difficult situation. We believe that we have done our best; as far as doing what is the intent of the Commission.

We very much respect in the Commonwealth this established body. We look forward to working diligently with this organization; to come to a time where we all have reference points and science that can be used in making good, informed decision as we address this species, so thank you very much for your time.

CHAIRMAN MESERVE: Pat Keliher.

MR. PATRICK C. KELIHER: I too want to comment the Commonwealth of Virginia; they have as the Executive Branch has done its work in due diligence to try to rectify this with the Legislative Branch. They have not been able to do so. I don't think we should be holding them hostage on this. I have been kept up to date from Commissioner Bowman; along with Commission leadership. It's clear that they've worked hard to try to resolve it; and have not been able to do so. I think it is time to move on, and I think this motion will allow us to do that.

CHAIRMAN MESERVE: Steve Murphey.

MR. STEVE MURPHEY: I would like to also congratulate the MRC; I think they've done yeoman's work on this. I think they were in a tight spot on this. I think they have done about everything you could do to try to address this. I support the motion; and I think my mind was really changed on this after listening to, I believe it was National Marine Fisheries talk about really the science behind this or the lack thereof.

I think it is a reminder to us as we move with not only this plan; but other plans that we need to remain vigilant that our management recommendations are science based and not pushed one way or the other by something that appeals to one group or the other. I support this motion.

CHAIRMAN MESERVE: Andy Shiels.

MR. SHIELS: I'm not opposed to this motion. But what concerns me is the final sentence; and I would like to at least open up for further discussion what that means. It says the Board will consider action to modify the Bay Cap after it completes action on ecological-based reference points. In the previous presentation we heard that at least at this time there is no plan to address the Bay separately in developing ecological reference points. We heard it was a coastwide, population-wide development of ecological reference points.

I believe that is what I heard. Whether it's in this motion or whether it is reserved for further discussion, what would make me comfortable is

specifically calling out that that study on ecological reference points will include the Bay proper. That way when we get to this point where a decision needs to be made, the Board will have all the information it needs to determine whether there is an impact coastwide, or within the Bay, or combined.

CHAIRMAN MESERVE: My take on the motion is that following the conclusion of the assessments, the next document be it an amendment or addendum, would deal with considering adoption of ecological-based reference points. Following that a subsequent action would deal with the Bay Cap. That is the intent of the maker of the motion, I believe. Did you want to clarify further that? No, okay. I'm going to stick with my list, unless Andy, you wanted to see further changes.

MR. SHIELS: I didn't feel that what I said was captured there. I want to make sure that based on the previous presentation, where it seemed clear to me that we were looking at the population coastwide as a whole. That we, because this motion and what's brought us here today is what's going on in the Bay; that may be more important than the coastwide analysis as a whole is the component of the Bay, and what it does to striped bass and nursery water for the entire population of menhaden, and for striped bass. Either here or some sort of assurance before we leave this item that we're going to address the Bay as its own part of the ecological reference points.

CHAIRMAN MESERVE: Robert Boyles.

MR. BOYLES: Andy, I certainly understand your concern. The intent when making the motion, you know recognizes in my mind at least that the golden ring for the Commission is this development of these ecological reference points. That is a heavy, heavy, heavy lift. Brave new world, a lot of new ground, and I think that for me at least, from my perspective that is my interest with respect to South Carolina is making sure we can focus on that golden ring.

The reason that I put this in the motion is; I think it is important that we remind ourselves that we have talked about the concept of localized depletion for the past decade plus. The reason here was an attempt to build consensus that yes we are not dismissing this issue. The Amendment in place is still a 51,000 metric ton cap.

We've heard from the Commonwealth that that cap during fishing year 2018 was not exceeded. I think what I would suggest to you, Andy, is I'm very interested in revisiting this issue of the Bay Cap, not necessarily as part of Amendment 4. Let me be clear about that; not as part of the ecological reference points.

CHAIRMAN MESERVE: Bob Ballou.

MR. BALLOU: I do support the motion; but I do want to note that my support is wholly dependent on the report out from Virginia that the cap as set forth in Amendment 3 has not been exceeded. In fact I think it was represented that it didn't even come close to being exceeded; and that this motion is conditioned on continuing to ensure that that cap is not exceeded.

With those two data points, I feel that we do have a good basis, a good sound policy basis, if you will, to support this particular motion. But I do want to note those two points for the record; because I really think they're hugely important. If the cap had been exceeded, I would have a much different take on the status of this issue.

CHAIRMAN MESERVE: That is on the record. We're going to continue to get regular updates on the reduction fishery landings in the Bay; and the Board would have another, based on this motion we would have another discussion about it were the cap to be exceeded. Next is Ritchie White.

MR. WHITE: I also support this motion. I believe it provides an opportunity for Omega

Protein to partner with the Commission; with the management of menhaden in Chesapeake Bay. I think it's a great opportunity for them and for us. I clearly hope that it goes as it has in the past.

CHAIRMAN MESERVE: John McMurray.

MR. McMURRAY: I want to go back to Andy's question; because I don't think it was properly addressed. How are we going to deal with the Bay Cap after we have the reference points? My question earlier and the response given was that we're not going to look at the Bay specific. We don't have the resources to do that right now.

What's the plan? I mean this is the burning question. I still don't understand why this Commission can't make precautionary policy decisions based on something that is to me intuitive. I think Andy was asking how we're going to address that. I mean it's nice that we put it in the motion. But it doesn't really mean much to me anyway.

CHAIRMAN MESERVE: I think there are some uncertainties; and part of it will be contingent upon what comes out of the assessment. It's hard to say with clarity where we're going to be; although Katie has indicated that there may be some information within the latest assessments that would lead us to look at, to consider the appropriateness of the cap level. But we are in a bit of a wait and see, but it is clearly expressed in the motion that we plan to revisit it.

DR. DREW: Yes, I would say that for sure the final results of the formal models will be on the coastwide level. We may be able to provide some sort of follow up post hoc analyses; to help provide some additional information on the Bay, relative to the rest of the coast. But it will not be the same. It will not be a fully spatially explicit model.

Then it becomes up to the Board to, as you say, determine how precautionary you want to be on this specific regional management questions, when we don't have a fully regional model. That I think is something that you will have to address; based on what we can provide you through the ERP assessment, and whether that satisfies your need to make decisions.

CHAIRMAN MESERVE: John, go ahead.

MR. McMURRAY: Sorry, I don't want to extend this any more than it has to be. I mean the bigger question in my mind, and maybe you could answer this, but I'm guessing that you can't is can this Commission without rock solid science, which we'll probably never have, make a policy decision based on what we know and what our constituents want us to do with the public resource? I guess that's it.

CHAIRMAN MESERVE: Robert.

MR. BOYLES: Yes John, I think that's a great question. We heard from NOAA Fisheries in August; who reminded us of the requirements of the law for enforcing compliance, to create the conditions by which the Secretary could enforce compliance. You all bluntly, we've outkicked our coverage with this particular action. There is by my read of the law, there is one requirement for this Commission to find a jurisdiction out of compliance; and that is they are not fully and faithfully executing the provisions of the plan.

There you all, I think we've been briefed, but just to refresh our memory should this Board and the Commission find the jurisdiction out of compliance. There is the provision by which we notify the Secretary of Commerce; that sets in a very prescribed review of what is required for the Secretary to enforce that noncompliance. Chip Lynch did a great job of reminding us of those requirements back in August.

I think it's important to recognize that there are two conditions that the Secretary must find; in

order to enforce that compliance. There is a disconnect between what this Commission is required to do, and the standards by which the Commissioner must act. That is the reality of the situation. I'm not happy about it, don't like it. But I go back to those values. We must conduct ourselves according to the law. I think at the end of the day, I go back to one of the first values listed in our Strategic Plan; and I think it's an important one, and that is cooperative. This is a very difficult amendment. We all struggle with it. But I think it's important to note that the law doesn't support a noncompliance finding here. That is the hard and fast fact.

I think it's really, really important that we keep these decisions about these resources around this table. Quite honestly, perhaps some days I would feel better about myself, about for a day, if we just said let's kick this up to the Secretary of Commerce. But I think we know enough. We've heard enough from our attorneys; we've heard enough from NOAA, with respect to what the law requires, and this is the situation we find ourselves in.

I'll note for the record to remind you. Virginia did prepare, did prepare an appeal to this action, and that appeal was withdrawn. We've found ourselves a little bit in a corner; and I think this is the most prudent course of action. I think it is important that we recognize the concept, and keep alive the concept of localized depletion.

Let's try to learn more about this. My folks back home are concerned about weakfish. Some of your folks are concerned about striped bass. Some of your folks are concerned about bluefish or sharks. Let's do what we can to keep focused on the matter at hand; in developing ecological reference points.
Bay Cap, I mean the Chesapeake Bay is a wonderful, wonderful system. Those of you who were charged with its stewardship; I'm somewhat envious of, beautiful place to live, and to work, and to play. We'll get there, but we've outkicked our coverage right now. Thanks.

CHAIRMAN MESERVE: John Clark and then Eric Reid.

MR. CLARK: The Board is clearly in a tough spot today. This is putting lipstick on a pig here, but I would just like to say as to actions the Board can take. As long as we look at this as a compliance action we are very limited; we're between the rock of the corporation and its friends in Richmond, and on the other hand the Secretary of Commerce, whom the less said about the better. But we could also look at this as an allocation issue. Under Amendment 3 we have adaptive management.

Whether there is a scientific basis for the 51,000 metric ton cap for the Bay is beside the point. It's in the Amendment. It was taken out to the public; the public overwhelmingly supports the cap. We as a Board, I think do have power through the adaptive management, to take actions that could make Virginia see that it's in their interest to put the cap into place. I'll just leave it at that.

CHAIRAMN MESERVE: Eric.

MR. ERIC REID: As far as the original motion goes. To me it's a dead end, it's a no win, you call it whatever you want. It's going nowhere. I would prefer to support this motion. We could find the Virginia Legislature out of compliance, because they're out of compliance. As far as our fellow Commissioners, which one of them may be governor here in the next couple of days. I prefer to support the future governors of the state of Virginia in their efforts; and also you know support industry as well. Industry is in compliance. Our Commissioners have done everything they possibly can to do what is right. My preference is to support this motion, support the industry, and support our fellow Commissioners in the spirit of cooperation.

CHAIRMAN MESERVE: Ray Kane, last comment.

MR. RAYMOND W. KANE: I would like to thank Katie, first of all, for a very comprehensive presentation to the lay people sitting around this table. Let's have some solace in the fact that we are going to do a biomass survey in the Chesapeake Bay by way of an aerial survey, which have proven to be very effective in other fisheries.

I know we don't have a timeframe when Katie and her staff can come back and say this is what we learned from the aerial surveys. I'm sure it's five or six years down the road, because vessels have to be integrated with aerial survey and what not. But I would speak in favor of this motion; knowing that once we have an aerial survey completed, and we have our ERPs in place, we can move forward.

CHAIRMAN MESERVE: I just want to clarify that the survey is not a given yet. It's very contingent upon funding a successful survey design long term plan. Yes, Marty Gary.

MR. MARTIN GARY: I purposefully held off to listen to other folks around the table; everybody is vested in this issue. Not that PRFC is more vested than anybody else, but we are geographically, demographically, politically as close to this issue as any jurisdiction sitting around the table.

Our jurisdiction, our community wants an abundance of menhaden in the river for our pound netters, for our charterboat operators that rely on menhaden for bait, for our crabbers, for our sport fishermen that want an abundant pretty species in the river for predatory species like striped bass. That is why we supported the Cap. But we've also seen since 2012 the Cap hasn't been raised. We know the uncertainty around the science. We know the political landscape and the trajectory through an appeal process.

It's all been stated well. I think Robert hit the key word; and I just really appreciate it, cooperation. I get to experience that with my sister jurisdictions, the Commonwealth and Maryland day in and day out, and I could tell you first hand this is exemplary what they've done with menhaden, and their cooperation. I support the motion. I just wanted you all to hear it. We're right at the epicenter of this; it's as meaningful to us as anybody at the table, and we support the motion.

CHAIRMAN MESERVE: I think we're at a place. Does the Board need a moment to caucus? Let's just take one minute to caucus. Is the Board ready; question, Roy Miller?

MR. ROY W. MILLER: Madam Chair, could you or perhaps someone on staff review for us exactly what is meant by postpone indefinitely? Does that mean the item could come up again for discussion if the cap were exceeded; or does it mean it can never come up again for discussion?

CHAIRMAN MESERVE: I did ask staff for some clarification on this in advance. Postpone indefinitely means that this could come back up; but it would take a new noncompliance motion to bring it back. It's different from tabling or postponing in that way; but it could be reintroduced with a new motion.

With that clarification let's give this a try. Is there any opposition to the motion? Seeing one; we will start from the top then. **All those in favor of the motion please raise your right hand. All those opposed like sign. Are there any null votes or abstentions**?

MR. BOWMAN: Madam Chair, a question. This is a final action; should a roll call vote be taken or not?

CHAIRMAN MESERVE: Staff is indicating it's not considered a final action; but a roll call could be requested if desired.

MR. BOWMAN: No, thank you.

CHAIRMAN MESERVE: **With no nulls and no abstentions, the motion passes 17 to 1; and that is our final agenda item, and I appreciate the Board's brevity today**.

ADJOURNMENT

CHAIRMAN MESERVE: If there is no other business to come before the Board, we are adjourned. Thank you very much.

(Whereupon the meeting adjourned at 9:15 o'clock a.m. on February 7, 2019)