# PROCEEDINGS OF THE ATLANTIC STATES MARINE FISHERIES COMMISSION ATLANTIC STRIPED BASS MANAGEMENT

The Westin Alexandria Alexandria, Virginia May 9, 2017

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- 1. Approval of agenda by consent (Page 1).
- 2. Approval of proceedings of February 2017 by consent (Page 1).
- 3. **Move to approve Draft Addendum V for Public Comment** (Page 11). Motion by John Clark; second by Mike Luisi. Motion failed (Page 20).
- 4. Move to approve the 2018 Atlantic Striped Bass Benchmark Stock Assessment Terms of Reference as presented today (Page 24). Motion by John Clark; second by Russ Allen. Motion carried (Page 24).
- 5. Move to adjourn by consent (Page 26).

#### **ATTENDANCE**

#### **Board Members**

Patrick Keliher, ME (AA) Steve Train, ME (GA)

Sen. Joyce Maker, ME, proxy for Sen. Langley (LA)

Sen. David Watters, NH (LA)

Dennis Abbott, NH, Legislative Proxy

G. Ritchie White, NH (GA) Doug Grout, NH (AA)

Dennis Abbott, NH, proxy for Sen. Watters (LA)

Rep. Sarah Peake, MA (LA) Raymond Kane, MA (GA) David Pierce, MA (AA)

Mike Armstrong, MA, Administrative proxy

David Borden, RI (GA)

Mark Gibson, RI, proxy for J. Coit (AA) Eric Reid, RI, proxy for Sen. Sosnowski (LA)

Mark Alexander, CT (AA) James Gilmore, NY (AA)

Steve Heins, NY, Administrative proxy

Emerson Hasbrouck, NY (GA)

John McMurray, NY, proxy for Sen. Boyle (LA)

Russ Allen, NJ, proxy for L. Herrighty (AA)

Tom Fote, NJ (GA)

Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)

Andrew Shiels, PA, proxy for J. Arway (AA)

Loren Lustig, PA (GA)

John Clark, PA, proxy for D. Saveikis (AA)

Roy Miller, DE (GA)

Craig Pugh, DE, proxy for Rep. Carson (LA) Ed O'Brien, MD, proxy for Del. Stein (LA) Mike Luisi, MD, proxy for D. Blazer (AA)

Rachel Dean, MD (GA)

Rob O'Reilly, VA, proxy for John Bull (AA)

Catherine Davenport, VA (GA)

Michelle Duval, NC, proxy for B. Davis (AA)

Doug Brady, NC (GA)

David Bush, NC, proxy for Rep. Steinburg (LA)

Martin Gary, PRFC Derek Orner, NMFS Sherry White, USFWS

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

#### **Ex-Officio Members**

Nicole Lengyel, Technical Committee Chair

#### Staff

Robert Beal Toni Kerns Katie Drew Max Appelman

#### Guests

Alex Aspinall, VMRC
Robert Brown, Sr., MCBA
Victoria Brown, MCBA
Benson Chiles, Chiles Consulting
Matthew Gates, CT DEEP
Colleen Giannini, CT DEEP
Robert Glenn, MA DMF
Zach Greenberg, PEW
Ken Hastings, Ships Forever
Ken Hinman, Wild Oceans

Mike Jarbeau, Save the Bay

Aaron Kornbluth, PEW
Wilson Laney, USFWS
Phil Langley, MD Charterboat
Assn.
Arnold Leo, E. Hampton, NY
Chip Lynch, NOAA
Jason McNamee, RI DEM

Robert Newberry, DelMarVa Fishermen Assn.

Patrick Paquette, MA SBA

Mike Millard, USFWS

Stacie Ross, Malkin & Ross Alexei Sharov, MD DNR Jack Travelstead, CCA Paul Eidman, Anglers Cons. Network

John Bello, VA Saltwater Sportfishing Assn.

The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, May 9, 2017, and was called to order at 1:35 o'clock p.m. by Chairman James J. Gilmore, Jr.

#### **CALL TO ORDER**

CHAIRMAN JAMES J. GILMORE, JR.: Let me jump right into it.

#### APPROVAL OF AGENDA

CHAIRMAN GILMORE: First off we have our first agenda item, approval of the agenda. You've got them in your briefing package. Does anybody have any additions or changes to the agenda? Seeing none; we'll adopt those by consensus.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN GILMORE: Second is the approval of the proceedings from February, 2017.

Are there any changes or modifications to the proceedings? Seeing none; we'll adopt those by consensus.

#### **PUBLIC COMMENT**

CHAIRMAN GILMORE: Before each meeting we have the opportunity for public comment for issues not on the agenda. I did not see anyone sign up for this part of it; but is there any public comment for issues not on the agenda? Oh, sorry, Des. You can grab a microphone right there Des, any open one is fine.

MR. DESMOND KAHN: My name is Desmond Kahn; for you who do not know me. My background is I have a PhD in Population Ecology, and I have 25-years experience in stock assessment and marine fisheries management. I was on the Striped Bass Technical Committees for about 15 years or so.

I just have some sort of broad comments at this point on the overall direction of striped bass management. I'm currently thinking of fisheries management as the balance between two goals; one is conservation, the other is utilization. I

think we need both in my opinion. In my opinion, striped bass management currently lacks balance.

It is tilted very far toward the conservation end, and it is denying people the utilization of this resource. There are some tradeoffs that occur when that happens that I would just like to briefly outline for you. One thing that causes this is the current reference points. I am very aware that the 1995 biomass level is the current overfishing threshold.

Now I know and you know there is no scientific basis for that choice. It was just something that the Board, as I remember, said they liked that biomass level that was the level they declared the stock restored, so that's going to be our overfishing threshold, we're not going to let the stock fall below that. But that's not a scientific choice.

Then the target is so high that it's really in the realm of the carrying capacity of the stock. I would like to request that the Board ask the Technical Committee to develop a set of reference points based on maximum sustainable vield; which is the Magnuson-Stevens standard and what the federal fisheries used for their management. Now I'm not saying that should be automatically the reference points for this management process, but I think it would be something that would give you a valuable perspective on your current reference points; which are extremely conservative. I have seen a maximum sustainable yield modeling approach; surplus production modeling of the striped bass stock. What it found was that the biomass that would produce maximum sustainable yield.

Now that is in many of the federal fisheries that is the target. The biomass that would produce maximum sustainable yield is below the current overfishing threshold for striped bass. That is how high the reference points are. Now, if you remember under the usual federal system they frequently will set the overfishing.

CHAIRMAN GILMORE: Des, we're actually going to be talking about this later on for some of the

later on discussion. This is stuff for really not on the agenda.

MR. KAHN: Excuse me, okay. I wasn't sure about what your discussion was going to involve. Okay. Well let me just talk about the conservative nature real quickly, okay. The tradeoffs for that are two. One is when we have a very high density, this is known from ecology, we will get negative feedback; density dependent mortality due to interspecific competition.

That has been documented extensively in the Chesapeake Bay. There has been a great waste of striped bass due to very high mortality; due to disease and starvation. This has been published in scientific papers. I'm not sure the management board realizes that by setting the biomass target so high, they've caused that waste and mortality.

Second off, the impact of a very high abundance of very large fish on other species, is well documented; although the Board's don't seem to have seen this information, and I'm talking about particularly American shad and river herring. In the Delaware River the spawning stock is negatively correlated with the abundance of striped bass.

That tells me, and there are extensive dive studies in the Connecticut River that striped bass are eating even adult male shad, and they definitely eat the juveniles. There is a lot of published information indicating striped bass predation is depressing the abundance of shad and river herring now, at these high levels.

Now on the one hand you're wearing a hat of a striped bass manager, and on the other many of you are on the Shad and River Herring Board. What you're doing is you're working at cross purposes. I'm not sure you're even aware of this or have been informed of this. I would like to request some investigation of these issues. Thank you very much.

CHAIRMAN GILMORE: Thanks, Des. I have two others for comments. But I understand they're

going to be reserved until later on if we get into motions. Unless there is anyone else that has a public comment on things not on the agenda; we're going to move on.

### CONSIDER DRAFT ADDENDUM V FOR PUBLIC COMMENT

CHAIRMAN GILMORE: Okay, next agenda item is Consider Draft Addendum V for public comment. As you are all aware that we have an addendum before us that was essentially brought up by the Chesapeake Bay states for a consideration of maybe some liberalization and Max is going to lead us through that discussion.

MR. MAX APPELMAN: Yes, today I'm going to walk the Board through Draft Addendum V. The proposed options themselves are relatively simple; but there is a lot of important background information I need to get through, so bear with me. At the end I'll take any questions on the document before Nichole, our TC Chair takes us through the TCs comments on those options. A look at the timeline, today the Board will consider approval of Draft Addendum V for public comment. If approved the public comment will be May through July.

Then in August the Board will review public comment, select final options and take final action on the addendum. This is a look at the outline of the document. We have a statement of the problem. There is an overview of management history, stock status, fishery status, there is a section on the performance of Addendum IV, which bleeds into the management options and then wraps up with the compliance schedule.

Draft Addendum V was initiated to consider a relaxation of the coastwide commercial and recreational regulations, to bring fishing mortality to the target level based on the 2016 stock assessment update. This action came in response to concerns raised by Chesapeake Bay jurisdictions regarding the continued economic hardship endured by its stakeholders, since the implementation of Addendum IV; but also following information coming from the 2016

stock assessment update indicating that fishing mortality in 2015 was below the target.

You'll also see throughout my presentation, Chesapeake Bay abbreviated as C. Bay. I just wanted to let folks know that that is what that stands for. Okay so as we know, Atlantic striped bass has a very impressive management history. In the interest of time I'm just going to highlight those management documents and decisions most relevant to this draft addendum.

With the implementation of Amendment 4 in 1990, the foundation of this management plan has been to maintain fishing mortality at or below an F target. Currently Atlantic striped bass is managed under Amendment 6, and its Addenda I through IV. Aside from phasing in new commercial and recreational regulations, Amendment 6 also modified the F reference points.

The coast operated under a single set of F reference points while the Chesapeake Bay and other producer areas operated under a lower F target. Amendment 6 also put in place a new set of biological reference points; based on the 1995 estimate of female spawning stock biomass. In addition to all this, Amendment 6 put in a set of management triggers that are based on those biological reference points.

Fast forward into Addendum IV, which was implemented just prior to the 2015 fishing season, a lot of things happened with Addendum IV; one of which is that it implemented a single set of F reference points for all areas. Now the coast, the Chesapeake Bay, all the other producer areas operate under a single set of F reference points.

Additionally the addendum required a reduction in removals, to reduce fishing mortality to a level at or below this new target. To achieve this, fisheries implemented regulations to reduce removals by 25 percent along the coast; relative to 2013, and 20.5 percent in the Chesapeake Bay, relative to 2012.

This is a guick reference of those Addendum IV measures. I'm not going to waste the time on this slide now. I'll come back to this in a little more detail, when we go over the proposed management options. This is a figure of spawning stock biomass relative to its reference points. What you can see here is a decline in SSB that has been observed since about 2003; and in 2015 was estimated at 58,853 metric tons, which is just above the threshold of 57,626 metric tons. I would like to remind the Board at this point that if biomass falls below the threshold it will trigger management action, requiring the Board to adjust the program to rebuild biomass to the target. This is a figure of fishing mortality relative to those reference points.

You can see F reaching a peak around 2006, and then becoming somewhat variable since then. In 2015, F was estimated at 0.16; which is below the threshold and below the target, the threshold being 0.22 the target is 0.18. However, the TC has noted that the assessment may not be able to distinguish between point estimates of 0.16 and 0.18; essentially that the confidence intervals around these two point estimates would overlap.

Okay, moving on to fisheries status, so starting with the commercial sector. From 2003 to 2014, under the Amendment 6 quota system, commercial harvest has been relatively stable. Coastal fishery harvest estimates have ranged from 2.4 to 3.1 million pounds over that time period, and Chesapeake Bay estimates have ranged from 3.3 to 4.4 million pounds.

In 2015, following the implementation of the Addendum IV regulations, so cutting back on the quotas; the coastal fisheries harvested an estimated 1.9 million pounds, and the Chesapeake Bay 2.9 million pounds. Just a couple more points on the commercial sector. First off commercial dead discards continues to be a source of uncertainty in stock assessment.

Estimates do vary considerably from year to year, which has made it difficult to account for these when developing alternative management measures. In any event, in 2015 commercial

dead discards were estimated at just shy of 300,000 fish; which is a 68 percent decrease from the 2014 estimates, so a pretty big difference there.

Another point is that the coastal commercial fishery under achieves its quota by 20 percent annually. Some of that can be attributed to striped bass being designated as game fish in some states; those being Maine, New Hampshire, Connecticut and New Jersey. Collectively those states account for 9 percent of the annual quota.

But in addition in recent years, striped bass have not been available to the ocean fisheries in North Carolina, resulting in minimal harvest there and I think that North Carolina holds 10 or more percent of the annual quota. Moving on to the recreational sector from 2003 to 2014; again under the Amendment 6 regulations harvest has been somewhat variable, but it has been trending down since about 2006.

Coastal fishery harvest estimates have ranged from 16.7 to 26.6 million pounds; with 77 percent of that coming from Massachusetts, New York, and New Jersey. Then Chesapeake Bay harvest estimates ranging between 2.5 to 6.4 annually. In 2015, following implementation of Addendum IV, again harvest reductions measures were put in place; coastal fisheries harvesting 13.3 million pounds in 2015 and Chesapeake Bay 3.5 million pounds.

From 2003 to 2008, recreational releases averaged 17 million pounds, I'm sorry million fish. That equates to roughly 1.5 million dead discards annually. Now from 2009 to 2015 that number of fish released has been much lower; averaging only 7.1 million fish, which equates to just shy of 640,000 dead discards a year. There is a couple theories out there as to why we're seeing those declines in fish released. This list is by no means inclusive. There are certainly other factors that are probably at play. But just to list off a couple; reduced biomass or abundance, it could be the reduced availability of fish in nearshore waters or simply just changes in angler behavior due to management changes.

Building on the last few slides, just want to take a look at what happened in 2015 under Addendum IV.

In early 2015, after states had implemented those measures to comply with Addendum IV, the TC predicted an overall reduction of 25 percent relative to the reference periods. In 2015, what we saw was something very close to that predicted on a coastwide scale; I think it was off by maybe a tenth of a percentage point.

However, harvest from the recreational fisheries in the Bay and along the coast diverged significantly from that predicted value. The TC was tasked to investigate this a little bit further. What they concluded is that changes in effort, changes in the size and age structure of the population, and the distribution of the 2011 year class, were the most significant variables contributing to that large difference between the observed harvest and that predicted by the Technical Committee.

A couple more points on this 2011 year class, so remember that this was the largest recruitment event since 2004; and the TC noted, looking at the catch data that these fish were nearly fully available to the Chesapeake Bay fisheries in 2015, but only partially available to ocean fisheries. Due to the age at first migration, these fish are anticipated to become increasingly available to coastal fisheries in the coming years; and a proportion of which are already of harvestable size.

After receiving this information the Board tasked the Technical Committee to calculate how many fish it would take to increase fishing mortality from that 2015 point estimate of 0.16 to the target, 0.18 in 2017. To do those the TC ran projections through 2017 and determined that F target in 2017 equates to a removal estimate of roughly 3.3 million fish or approximately 10 percent increase relative to 2015.

Accordingly, Draft Addendum V proposes measures to increase removals; so this is your commercial-directed harvest, your recreationaldirected harvest and dead discards by roughly 330,000 fish, which is a 10 percent increase relative to 2015. Keep in mind that the proposed options were developed using 2015 catch data; and the Plan Development Team focused on applying those increases to both the recreational and commercial fisheries equally.

Also Draft Addendum V does not propose any changes to the commercial size limits or quota transfer provisions, nor does it propose changes to North Carolina's FMP for the Albemarle Sound and Roanoke River. These are the proposed recreational options first. Option A here is status quo.

For coastal fisheries this maintains the Addendum IV measures, with a 1-fish bag limit and a 28-inch minimum size limit, and any approved conservation equivalency programs. For the Chesapeake Bay, jurisdictions would implement a program that is subject to TC review and Board approval; and that program has to meet the requirements of Addendum IV.

It is important to note that status quo has the potential to increase harvest by more than 10 percent. Coincidentally MRIP came out with their final 2016 estimates last night, and I was able to incorporate those into this PowerPoint. These numbers up on the screen are slightly different than what are in the draft document in front of you. But in 2016, recreational removals, so this is your directed harvest plus your dead discards, are estimated at over 2.5 million fish, which is a 22 percent increase relative to 2015; just talking recreational. But this difference is actually also greater than the 330,000 fish that the addendum is set out to achieve.

Not only does status quo have the potential to increase recreational removals by more than 10 percent, but it also has the potential to increase total removals, commercial and recreational by more than 10 percent. Option B for the recreational sector would be to relax recreational fishery regulations.

These options were developed based on 2015 catch data and 2015 state-specific regulations accounting for any conservation equivalency.

For Option B1, states would maintain a 1-fish bag limit and reduce the minimum size limit to 27-inches. This represents a 1-inch decrease in the minimum size; and based on 2015 information this would achieve roughly a 12 percent increase in removals relative to 2015.

By choosing B1, states would essentially implement those measures that were in place in 2015, including any conservation equivalency programs and adjust the minimum size to 27-inches. Option B2 is a conservation equivalency-type option, where states would go through that process to implement a program that achieves a 10 percent increase relative to 2015.

For the Chesapeake Bay, Options B3 and B4 are very similar to the coastal option. They were also developed based on 2015 catch data and 2015 state-specific regulations; including conservation equivalency that was in place. The difference here is that these measures would only apply to the specific dates listed.

Both B3 and B4 maintain a 2-fish bag limit and decrease the minimum size to 19-inches from September 1st to October 31st for Option B3, or during May 16 to August 31, under Option B4. Also under both of these options, one of the 2-fish bag limit can be greater than 28 inches. This represents a 1-inch decrease in the lower bound of that current slot limit.

Then also based on 2015 information, these options each achieve roughly a 9 percent increase in total Chesapeake Bay removals relative to 2015. Option B5 is again the conservation equivalency type option, where jurisdictions would go through the process to implement a program that achieves a 10 percent increase relative to 2015.

Moving on to the commercial options, so again Option A is status quo. Coastal fisheries would maintain that Addendum IV quota and the state-specific allocations. Chesapeake Bay fisheries would similarly maintain the Addendum IV quota of just over 3 million pounds. Option B is a 10 percent increase to the Addendum IV quota.

For coastal fisheries the quota would be bumped up to a little over 3.1 million pounds, and would be allocated based on those same allocation percentages used in Amendment 6 and Addendum IV. The Chesapeake Bay commercial quota would be bumped up to a little over 3.4 million pounds. This is a table of the proposed quota options in pounds.

I know the numbers might look small upon the screen there. But I'm going to walk you guys through this. At the top, working top to bottom we have the Bay and coastal total quota numbers; and then followed by the state-specific-coastal allocations, and then there are two rows at the bottom, which I'll get into. From left to right we have 2015 harvest for reference. In the middle is Option A, status quo, which is the Addendum IV quota. Option B applies a 10 percent increase to the Addendum IV quota.

At the bottom there are two rows, and in some of those cells you see two numbers; a top number and then a bottom number in parentheses. These are two different total estimated harvest scenarios. The top number assumes no harvest for Maine, New Hampshire, Connecticut and New Jersey; these are your gamefish states.

It also assumes no harvest for North Carolina, which we recall that North Carolina hasn't recorded any harvest in recent years. The bottom number in parentheses only assumes no harvest for the gamefish states. What this is saying is that under status quo, even after accounting for no harvest from those states, there is potential to increase harvest by 11 to 18 percent relative to 2015.

Under Option B that potential increases to 22 to 30 percent. Also these estimates do not account for commercial dead discards, which would add to that potential increase. The PDT also wanted to note that what you're not seeing is an option that applies a 10 percent increase to 2015 harvest; which is what the projections say is needed, but that would be an effective reduction in the coastal and state-specific quotas, when the addendum aims to liberalize.

For that reason the PDT removed that potential option from consideration. Lastly the compliance schedule, so this is something the Board would need to decide on sometime between now and final action. If the addendum moves along, final action would take place in August; and presumably these three dates would occur sometime after that.

Just as a reminder, the projections only go through 2017, so the Board should keep that in mind as it considers the compliance schedule. That is the end of my presentation. I'm happy to take any questions. Remember Nichole is going to go over the TCs comments, but that's it for me.

CHAIRMAN GILMORE: Okay, I've got Rob O'Reilly and Tom Fote. Rob.

MR. ROB O'REILLY: I'm wondering with these projections of how much increase there could be. The 2011 year class, I think it was in the document part of the management effort, was to conserve the 2011 year class while it was in Chesapeake Bay. Are there any projections for 2017 and even 2018 with these 2011 year class fish that are recruiting to the coastal fishery; as to what that might be? Nothing like that okay?

DR. KATIE DREW: To correct that sorry, to go back. The projections that were done included moving that 2011 year class forward through the population. The reductions that we're seeing are taking into account the fact that the 2011 year class will be recruiting to these fisheries; and will be available for harvest overall.

MR. O'REILLY: Right, okay so I may follow up, sir? Does that mean there is a probability associated with that; as far as what that increase might be or how does that work? I'm just asking.

DR. DREW: For the way we calculated the projections is essentially to move that population forward and to figure out if you fish at that level, how much fish can you take? If you fish at the target, how much fish can you take given the 2011 year class moving through the population? There is a certain amount of

uncertainty associated with that with the uncertainty coming from the assessment. I don't have those numbers in front of me, but we could go back and look at how much uncertainty there is around that.

MR. THOMAS P. FOTE: Could you put back the numbers of the commercial harvest back up again? I noticed on this table you project that New Jersey will not catch any fish. We're not catching a lot. I think it's about 10 percent of our quota. But we do have the tagging program, the bonus tag program; which basically is fish that come under that number there. It is not at zero harvest, there is a harvest of fish. It's a very small amount. I think it's about 8 percent or 10 percent of what our quota is. But there is a harvest.

MR. APPELMAN: Yes, I think it was the PDTs understanding that those fish that are caught in that bonus program actually are modeled recreationally.

MR. FOTE: That's not true. They are modeled in with the commercial catch, because it goes with the commercial catch quota. That is what the program is set up by legislation; and that's why we always keep it that way. It's a different quota altogether.

MR. APPELMAN: These percentages would go up slightly more.

MR. FOTE: Slightly more. Not dramatically, because we don't harvest a lot.

MR. APPELMAN: I think it's somewhere around 15 to 20,000 fish.

MR. FOTE: That's right. Which is less than 8 percent or something like that but it's there and we want to make sure it is always there.

CHAIRMAN GILMORE: John McMurray.

MR. JOHN G. McMURRAY: Rob already asked part of my question, but I guess I could go a little farther with those 2011s in there; the briefing material is pretty clear that they're going to

recruit this year or next year, or a lot of them will recruit this year and next year. I wasn't quite sure what your answer was.

Are we accounting for those in 2017 and 2018, because given where we are now, we're already, just based on the 2016 numbers; we're already likely to be over or right around F target. I think just intuitively that the availability of those 2011s will probably put us way over; and may even put us below that SSB threshold, because we're already pretty close to that now.

DR. DREW: The answer is they are accounted for in the projections; but they are not accounted for in the methods that we use to calculate how you get that increase. The increases are based on looking at how the fishery was performing in 2015; and if you drop that size limit down, people can catch fish that they threw back. But we don't have a way to project that data forward to say in 2017 what percentage of the catch would be in that slot? But the projections to say you can catch this many fish and be at the target, accounted for that 2011 year class moving in. But the methods to say you can reduce your size by 1-inch, or you can go up in your bag limit. That does not take into account the effects of the 2011 year class; which is a source of uncertainty, and you can see how much it affected our reduction calculations. We believe certainly, I'm sorry the TC comments will get into this a little bit. But that is certainly a source of uncertainty; in terms of calculating is this 10 percent on paper versus what we will see if this was implemented.

CHAIRMAN GILMORE: Go ahead, John.

MR. McMURRAY: Thanks. That sort of availability and angler behavior, and as somebody that does that's part of this business I know. If the fish are around people will target them. That is really not taken into account in any of this right now. That is a big uncertainty area.

DR. DREW: Certainly, in trying to calculate how much you'll see an increase or a decrease or a change in the harvest that you could see with these regulations. That is a very large source of uncertainty.

MR. G. RITCHIE WHITE: I want to understand the numbers you provided in terms of why we are here with this addendum. I understand the reason being that a number of charterboat fishermen in the Chesapeake Bay have been experiencing a drop in their business. Help me understand that; 2015 recreational anglers had a 58 percent increase in harvest from 2014. Did I hear that correctly or see that correctly?

MR. APPELMAN: The percentage that you are thinking of is relative to 2012; which were the reference period for the Addendum IV measures. They experienced a 50 something percent increase relative to 2012; which I think that number would be a lot lower if we looked at 2014.

MR. WHITE: Follow up. Okay so from 2012 they had a 58 percent increase. Then in the preliminary 2016 numbers are 22 percent increase over 2015. Is that correct?

MR. APPELMAN: Yes, and that is total recreational harvest and dead discards; so total recreational removals in 2016 is 22 percent higher than what it was in 2015.

MR. WHITE: Additional follow up, Mr. Chair.

CHAIRMAN GILMORE: Go ahead, Ritchie.

MR. WHITE: Then this addendum would account for an additional 9 percent increase; which if I total those up that is an 89 percent increase of recreational harvest since 2012. To me it seems like, I'm not disputing that there aren't some charterboat captains that are experiencing some difficulty. But the recreational angling population in the Bay seems to be doing extremely well. I know we would love to see numbers like that along the coast.

CHAIRMAN GILMORE: John Clark.

MR. JOHN CLARK: Thank you for the presentation. It is good to see the stock is increasing as it was projected to do; even before we took the 25 percent decrease in our harvest with Addendum IV. I just wanted to make a

comment on the socioeconomic impacts part of this addendum. Glad to see it's in there, but I think it is pretty thin; considering I know just from Delaware our netters have given up over a half-million dollars over the past three years, by having 25 percent less harvest. We took this cutback on a stock that was not overfished, overfishing was not occurring. Even when we put these much more conservative reference points in. I find the last line of this socioeconomic impacts section particularly gratuitous, in that on an increasing stock it says we have to be aware of the uncertainty in these projections.

Well, there is nothing uncertain about the economic hit that netters in Delaware have taken and the Chesapeake charter fishermen that have been here for the last three or four meeting we've had here. I don't think they're here just because they want a few extra bucks. They're here because they see a real threat to their business. I think this addendum at least gets us on the right track to correcting an over action that we took a few years ago.

MR. MICHAEL LUISI: I just wanted to make a comment regarding Ritchie's comment, and just to provide a little clarification. The 2012 estimate in Chesapeake Bay was I believe to be the lowest recreational estimate in a very long time series. It became the baseline for which we were judged. The year before that estimate came out; the 2011 year class was born.

By the time the 2011 year class recruited to the fishery, we were being judged based on Addendum IV, as it related to a very low recreational harvest estimate in Chesapeake Bay that year. Therefore, the 58 percent increase is an inflated value based on the comparison of those two years. These aren't new issues.

We've discussed these to this point today, and I'll just add one more comment that all of the background materials, which Max, you did a great job getting it all, bringing it all together, getting all the background materials in place. There was a comment early on that this was a Chesapeake Bay issue.

Well, it is not a Chesapeake Bay issue, this is a coastal allowance for increase; which has been supported for the past year and a half by a majority of this Board, to get to the point we are today. I just want to clarify for the record to the audience and the members of the Board that this is not just a Chesapeake Bay thing. We're not looking to just catch as many fish as we can with this addendum. Thank you for allowing me to clarify that, Mr. Chairman.

#### **TECHNICAL COMMITTEE REPORT**

CHAIRMAN GILMORE: Okay, I think we're going to go to the TC report now. Nichole.

MS. NICHOLE LENGYEL: My name is Nichole Lengyel; I work for the Rhode Island Department of Environmental management. Max already hit on some of these, and we've had some brief discussion on some of these as well. But today I'm going to be presenting comments from the Technical Committee on the proposed options in Draft Addendum V to Amendment 6.

Again, some of this will be overlap, so I'll try to be quick for time as well. Here is just a list of topics that the TC had comments on; but in particular the TC population projections, preliminary 2016 removals and as Max just said we have the final estimates now available. Discard data sources, the 2011 year class, angler behavior and performance of Addendum IV.

I'm going to hit on the comments that the TC had on each one of these topics. The TC presented the Board with population projections at their February, 2017 meeting, which showed that an approximate 10 percent increase in removals from 2015 levels would increase F to the target of 0.18 in 2017. However, management options adopted by the Board through Draft Addendum V, will most likely not be implemented until late 2017, early 2018; adding an additional year of uncertainty. Regarding the preliminary 2016 removals, the 2016 stock assessment update and the TC population projections used data through 2015 only.

The preliminary 2016 removals were estimated to be approximately 18 percent greater than 2015 removals under Addendum IV with no additional changes; and as Max just noted, the final estimates that came out showed that was more closely 22 percent not 18. Discard data was an important data element that went into the options presented in Draft Addendum V.

These data came from the American Littoral Society or ALS Fish Tagging Program and the MRIP program. These data sources can be variable year to year regarding the number of fish tagged and the level of sampling; and there has also been recent changes in MRIP methodology that the TC just wanted the Board to be aware of.

We've already touched on the 2011 year class a little bit, but we all know it's had a strong presence in the Chesapeake Bay in recent years. A larger proportion is expected to migrate to the coastal fishery in 2017 and in 2018. This will result in changes in catch, harvest and dead discards on the coast and in the Chesapeake Bay; which are not accounted for in Draft Addendum V options.

Angler behavior can be quite variable from year to year, and with changing regulations. It cannot be accounted for and therefore was not considered in Draft Addendum V. When the TC evaluated the performance of Addendum IV, we found that on a coastwide scale the 2015 harvest estimate was very close to the predicted harvest.

For the recreational fishery on the coast and in the Chesapeake Bay, harvest estimates differed significantly from those predicted. Recreational fisheries in the ocean saw a greater reduction than that was predicted; and recreational fisheries in the Chesapeake Bay experienced an increase in harvest relative to the reference period.

The most significant variables found to contribute to these large differences were changes in effort, changes in the size, age structure and distribution of the 2011 year class along the coast, relative to the Chesapeake Bay.

The proposed options in Draft Addendum V make very similar assumptions to those used in developing Addendum IV. The estimated increases therefore could be significantly under or over predicting harvest, and that's it. I would be happy to take any questions.

CHAIRMAN GILMORE: Questions for Nichole. Ritchie White.

MR. WHITE: Does the Technical Committee have any concern over coastal fishery harvesting 27-inch striped bass? We've always operated under 28-inches kind of being a minimum level in that I think it is 60 some percent of 28-inch fish are bred. Does this raise a higher risk if the coast starts harvesting a large number of 27-inchers that seem to be available in the 2011 year class this year and next year?

MS. LENGYEL: The Technical Committee didn't specifically talk about what biological implications could occur from reducing the minimum size. That happened to be one of the only options that came close to that 10 percent.

CHAIRMAN GILMORE: John McMurray.

MR. McMURRAY: I think there is a lot of confusion about what size those 2011s that are flooding the coast this year are. Are they 24 inches or are they 28 inches? I know there is some variability there. But it really makes a difference in the context of this addendum; because if we go down to 27-inches and really anecdotally that is what I'm seeing now, a lot of 27 and 28-inch fish.

If we go down to that 27-inches, we're really going to pound that 2011 year class as it floods the coast. I think to some extent we're already seeing that this year; and one inch probably does make a difference. Anyway, back to my question. What size are those 2011s? What is the range?

MS. LENGYEL: It's a little hard to give you a specific size. The age-length keys can vary not only regionally on the coast and then the Chesapeake Bay, but also state to state and year

to year. We know that they have recruited partially to the coastal fishery; and they're going to continue to do so in the next couple of years. An approximate guess without looking at the data, 25 to 30 inches right now, there is going to be a proportion that falls in one of those inch length bins. But it does vary quite a bit.

CHAIRMAN GILMORE: Other questions for Nichole. Go ahead, Michelle.

DR. MICHELLE DUVAL: I don't know if this is for Nichole or for Max. But the 2016 harvest estimates, were you able to break those down into coastal harvest versus Bay harvest?

MR. APPELMAN: Yes. I don't have it at my fingertips right now, and I can get those to the Board as soon as possible.

CHAIRMAN GILMORE: Any other questions before we start getting into motions? Michelle.

DR. DUVAL: Just one more question. The calculated 10 percent liberalization of the 327,000 fish, so that is just broadly calculated across all fleets; so that applies to both the coastal fleet and the Bay fleet, it is not taking into account I guess, the different size limits that are in those different jurisdictions. It is just sort of a "standard size striped bass" is how those 327,000 fish were calculated. Is that correct?

DR. DREW: The selectivity function of the separate fleets and weighted by how much each fleet takes out, was included in that affect. It does take into effect the different effects of the fishing fleet.

MR. APPELMAN: You were asking for the 2016 numbers in the Bay versus the coast. It is 1.18 million fish for the Bay, and 1.38 million for the coast.

CHAIRMAN GILMORE: Any other questions? Loren.

MR. LOREN W. LUSTIG: Thank you for the report that relates to the relative abundance of striped bass for legal fishing. Do we have any updated information regarding illegal take of fish and the impact on the species?

MR. APPELMAN: I don't have like a great number to give you or anything like that that. There is definitely some information that comes in our compliance reports for last year. The reports covering the 2016 season aren't due until a little later this month. Our LEC Chair to the Striped Bass Board is in the other room right now. Hopefully if he becomes available we might get you some more insight on that.

CHAIRMAN GILMORE: Any other questions? Go ahead.

MR. ANDY SHIELS: Just a quick question. The term angler behavior was used, and it was stated that it varies and it wasn't accounted for. Could you just elaborate on what you meant by angler behavior; and what that means?

MS. LENGYEL: Sure, so angler behavior is the behavior of an individual fisherman, how many trips they're going out for, is it worthwhile for them to go out and target two fish versus one fish. They have to account for their time, the money they're spending on gear, on fuel. Changes like that are not accounted for in any of these options; and it's very difficult to account for those. It's more socioeconomics. Does that answer your question?

MR. O'REILLY: I guess I just wanted to ask the Technical Committee. The idea of everything being in pounds, so fishing mortality rates are calculated based on numbers usually. Is there any similarity here with the pounds? In other words, how did you back everything out to pounds as the currency instead of numbers? How does that work?

MR. APPELMAN: You make a good point and thanks for that question. The removals are estimated and fishing mortality I believe, it is estimated in numbers of fish. The recreational options that you saw in C are based on number of fish. The quota options for the commercial sector are in pounds. There is a disconnect when we talk about a total number of fish that we can

remove to achieve F target; and using one currency for the commercial quotas and a separate one for the recreational fisheries.

We thought about a lot of different ways to address that. But the more we got into the weeds it became more and more complex and confusing to try to estimate numbers of fish from the commercial sector. To keep things simple, and the way that it was done for Addendum IV as well. This it he approach that the Plan Development Team took with those two sectors.

CHAIRMAN GILMORE: Any other questions? Okay this is an action item, so if we're going to move this along we kind of need to get a motion up on the board. John Clark.

### MR. CLARK: I would like to move that the Board approve Draft Addendum V for public comment.

CHAIRMAN GILMORE: Motion by John Clark and second by Mike Luisi; discussion on the motion. Go ahead, John.

MR CLARK: As stated, as was seen by Delaware's action in appealing Addendum IV, this 25 percent reduction in harvest; I understand why it was taken. I understand your perspective. The status of the striped bass stock depends on where you are on the coast. But we've seen the stock do what it was expected to do. It has definitely increased. Our fishing public has taken a big reduction in this, and the stock is showing all the signs of recovery that we expected. I would hope that at this point the Board can start giving some of that reduction in harvest back to the public.

CHAIRMAN GILMORE: Mike Luisi.

MR. LUISI: Unlike the last two addenda that we discussed this week, with lobster and then tautaug. This one is relatively simple; as far as what the main issue is, and that main issue is whether or not to allow for a 10 percent liberalization in harvest coastwide, both commercial and recreationally.

I've had a couple tacos and I've had about 15 cups of coffee today; so if we need to go back into all the details in the background information of the document, let's do it. It's not the first time we've had to do that. But I think at this point in time I don't need to talk any more, and we need to give the public an opportunity to weigh in on these issues.

We heard based on the report that the 2016 final estimates were made available yesterday. I think that is coming into play here; as far as what board member are thinking about, and how this is going to move forward. But let's let the process complete itself. The Board initiated this addendum, the issues brought up regarding variability and uncertainty, the issues brought up about harvest as compared to Addendum IV in current years has been discussed.

But the Board approved the initiation of this addendum, and I know for certain that my public stakeholders in Maryland want the opportunity to weigh in on this. Once we have all of that information, once we have the Technical evaluation, the public's comment both in opposition and in support. I think as a Board we have all the ingredients we need to make a final decision in August. I would hope that other Board members will also support taking this out to the public.

MR. WHITE: I'm not going to support this motion. I think it is risky on a number of levels. I think there is not enough room in the mortality to implement this. I think it is a knee jerk in that we've got a 2018 stock assessment, so this could be one year and then we'll probably have to go in to a management measure in reaction to the stock assessment.

There are a lot of unknowns. I think there clearly is going to be a change in anglers along the coast with the 2011 year class being available this year. There is going to be a lot of 27, 28-inch fish, as John has mentioned, that he is presently seeing. I think that is going to increase mortality substantially along the coast. I think that it makes no sense to take this risk at this time for one year, and put the Technical Committee and

the Commission through the expense and the effort that it takes to go out to public hearing.

I think we all know; I don't think there is anybody at this table that doesn't know what the results of the public comment is going to be. I would be astounded if one person would raise their hand and said; gee I don't know how the public is going to weigh in on this. We know what the public is going to say. Going through all that exercise, to me is a waste of our resources; and I hope we vote this down.

CHAIRMAN GILMORE: I've got Mark Gibson next.

MR. MARK GIBSON: I'm conflicted on this question. On the one hand, you know we're a Commission and we have an obligation to be sympathetic and responsive when members of the Commission come forward with a perception of a problem in one of our FMPs. The Bay jurisdictions have made impassioned arguments about this.

We've had people come to the meetings and speak in favor of this action. But I'm also a fan of the precautionary principle. The foundational element to that is that when you have signs of an improvement you're slow to open the valve. But when you have signs of a problem, you're quick to close the valve. That's the essential element of the precautionary principle.

Unfortunately I'm a fan of both principles, the cooperative and collaborative nature we're supposed to have here to be responsive to jurisdictions needs; but also to deal with the uncertainty. This stock is perilously close to the biomass threshold at this point. I may have some issues about the biomass threshold itself; and we'll talk more about that in the reference points. But I'm conflicted at this point, leave it at that.

CHAIRMAN GILMORE: You're going to have to get un-conflicted, because we're going to have to have a yes or a no. John McMurray.

MR. McMURRAY: Probably not terribly surprising that I don't support the motion. Frankly, I think it's reckless. There is very little biological justification for doing it. We are just a hair over that SSB threshold; and sure we had a couple of good young-of-the-year indices, but when you look at that average over the last ten years it is not great, because we also had two of the worst.

Yes, we're operating below F target, based on the 2015 removals. But when you look at 2016, not so much, and when you project out to 2017 and 2018, and you consider those 2011s recruiting. It seems almost a certainty to me that we're going to go over that F target; and an increase shouldn't be on the table at this point, in my opinion.

Frankly, there has been some impact with Addendum IV, but I'm not convinced that it is as catastrophic as it is being made out to be. When you look at the effort numbers in the Bay, they're up. I don't doubt that there is not some impact in some regionally significant areas, but it's not broad and it is not catastrophic in my opinion.

It's not worth the risk we would be taking with this. Lastly there is the timing issue. Do we really want to go out to public comment for this? Make all these guys to show up to public meetings and inevitably the halls will be filled, at least where I am and to the north, the halls will be filled with angry surf casters not wanting to see this happen.

We're going to have a new stock assessment in 2018, and we're likely going to have to do new management measures once we have the information from that. The next year we're likely going to have to do this all over again; and that just doesn't really make sense to me. For those reasons I'm opposed.

CHAIRMAN GILMORE: Doug Grout.

MR. DOUGLAS E. GROUT: We have heard for three or four meetings since Addendum IV was put forward, the harsh economic impacts that the Maryland Charterboat Fleet and the Chesapeake Bay Charterboat Fleet, as well as other Mid-Atlantic state's businesses have been impacted. I was sympathetic. We saw, if you look at some of the harvest numbers, and they were down in 2015 significantly, about 40 percent.

But that's not the only places we saw this. We saw reductions in New York that were over 50 percent, Massachusetts was over 50 percent, and probably about a 40 percent reduction in Rhode Island. Now as you would expect with a management measure that increased the size limit in the Chesapeake Bay, the reductions were temporary.

If you look at 2016 estimates, they are back up to the second highest levels of estimate of harvest they've had in the past seven years. That didn't occur on the coast. In those three states, all Rhode Island, Massachusetts, and New York, where a large portion of these charterboat harvests take place, continued in 2016 to see reductions.

My concern here is if you remember the reason we, if we were to move forward with this, if you remember the reasons that we took action in 2014 with our Addendum IV, was because we were required to under our management plan. The trigger that was hit was Number 3, the fishing mortality target is exceeded in two consecutive years, and the female spawning stock biomass was also below the target at the time.

As a result, our plan says the management board must adjust the striped bass management program to reduce the fishing mortality rate to a level that is below the target. Now as you all know, we have a bunch of other triggers. My concern here is the Technical Committee has already indicated that just in 2016 we've already experienced a 22 percent increase; that is more than double the 10 percent buffer we had in between there. People talk about the uncertainty with MRIP estimates. They are an estimate, they have variation around it.

But they are, as I say, outside of the confidence intervals here. We are pushing forward without even this action. We are at risk of starting to exceed the target again. My fear is after we've taken these painful cuts coastwide, and had them in place for at least three years, maybe a fourth by the time we get any kind of management action; depending on what we see on our stock assessment next year that we're going to have to take additional cuts.

If we were to implement an additional 10 percent increase here, those cuts would be even more painful. Not to mention that our public would look at us saying, what are you doing here? You have scientific information that says you're approaching the target again; and yet you're trying to increase it even further?

I think the Commission has to take a long, hard look before we make any further adjustments. We need to at least wait until we get the assessment; and then make a rational decision as to whether we need to make any further management adjustments. I'm hoping when this assessment comes that we can go back to what the pre Addendum IV levels are, because we've taken the pain for a few years and now we've got our spawning stock biomass on the way up, and we're continuing to keep our fishing mortality around the target. Thank you very much for my opportunity here.

#### CHAIRMAN GILMORE: Rob.

MR. O'REILLY: I think one thing that should be obvious to everyone is there was a lot of talk about 2012 being a low point. When you look through the data it certainly is. But everyone should understand that since 2012 the Bay will be faced with those types of conditions again. From now until the next few years the 2011 year class, which did have conservation attached to that year class in the Bay management measures.

That is not going to be available. There should be empathy with the plight of the charterboat/headboats going forward; because we're going to return to that situation. We're going to return to somewhere near 2012. It is not to say that the Chesapeake Bay, if you cobble together both the Virginia and the Maryland young of the year, that you can't come close to average or a little bit less in some of the years.

There is going to be some fish, but apparently over the years, you know from 2007 forward up until 2011, you can sort of trace what has happened to the stock. I do want to remind everyone to think about what goes around with the Bay is definitely going to turn; starting in 2017. The other thing that has been interesting to me, as I thought about it a lot the last few days, is when Amendment V started the work that was done in 1994, and Mark Gibson was one of the architects of the overall harvest control model, along with Lou Rugulo and Vic Crecco.

At that time there was a pretty equal distribution of harvest between the Bay and the coastal fishery. It was set up that way to have somewhat of an equal distribution. It seems to me that in the intervening years it's been sometimes not working out that way; you know feast or famine type of situation, depending on where you are.

Even with the Amendment 6 process, if you remember. Amendment 6 was delayed because there was a hiccup in that. There was a proposal to have everyone at 24 inches, which everyone thought would be great. We'll have one uniform size. Until it was pointed out that if that happens you shift allocation. You know you take exploitable stock biomass away from the Bay.

I think you have to think about the differences, as well as the similarities when you look at striped bass management. But clearly the most important thing is we can't solve some of these issues until we have a stock assessment. I understand that. I will have comments about that later. But for right now, consider not 2016. Start thinking about 2017, '18, and '19; and what it is going to be like in the Bay, because you have the information before you that should tell you exactly how it's going to be.

CHAIRMAN GILMORE: Matt.

MR. MATTHEW GATES: I can certainly sympathize with the frustration that the Bay anglers must have with so many fish available to them, that are below the minimum size, and the discard issue that that could create. That is why back in February I supported initiating the addendum; because it seemed fair to develop the analysis, and give an opportunity for this concept to be discussed at this meeting. But it seems that liberalization in management measures, based on this very small difference between the 2015 F and the target F, and for other reasons that we've all talked about here. It doesn't seem prudent to me to take this out at this time.

CHAIRMAN GILMORE: I have Marty Gary.

MR. MARTIN GARY: The Chesapeake for-hire fleet has been brought up a few times, but it's not just them it's our commercial sector as well. You've noticed at several meetings in the past, I count three, that we had multiple bus-loads of our for-hire sector and other fishery constituents that have taken the time to come up to these meetings.

Not that we haven't seen that in other areas up in New England, and seen all the passion on both sides of this issue. But I just wanted to say that they are not here today, because they're in the throes of their most important part of their season right now; the opening of the spring striped bass season. Their leadership is here today. But I think I respectfully disagree with a couple of comments that I heard that it would be a waste of our resources to take this out to public comment.

Those folks took a lot of their time over multiple iterations. You've seen them yourselves show up here. Their leaders are here. They may say something today. But I do think we owe it to the public, our fishing constituencies and the constituencies up and down the coast, to let this go out to public comment. I appreciate that and hopefully folks can support that.

DR. DUVAL: I'll be brief. I'm not going to echo all the comments that I made at the last meeting;

with regard to my own conflicted views on this. I definitely am sympathetic to the unique nature of the Bay fishery. We have the same thing with Albemarle/Roanoke stock in North Carolina.

I really do truly think that the only way to address these is through the upcoming stock assessment, and looking at the reference points again; and coming out with a solution that addresses the unique characteristics of the Bay fishery. I am concerned about timing on this. You know we heard some public comment prior to the start of our deliberations today; with regard to the reference points, which we will get into a discussion about next. It is not 1995 anymore, and I think we would support a different approach.

CHAIRMAN GILMORE: Okay, I think I'm going to go to the public now. We had a couple folks sign up for comment. Phil Langley, would you like to come up and make a comment?

MR. PHIL LANGLEY: Good afternoon. My name is Phil Langley; I'm President of Maryland Charterboat Association. I set on the Potomac River Fisheries and Maryland's Sport Fish Advisory. I would like to thank you, Mr. Chair, for the opportunity to make public comment; and I would like to thank the Board as well.

We are now entering our third year of Addendum IV reductions. Some of the things I was going to speak of have already been said here today. I'm going to be kind of brief. But I can assure you that it is difficult to get charterboat captains to local meetings, versus getting them to Alexandria for a public meeting. If it had not been an issue of concern for these guys, they would have not made the trip. Most of the 2011 year class has now entered the coastal migration. The 2015 stock update assessment showed that we were fishing below the Addendum IV target. I'm here this afternoon just I would like to ask the Board to approve Addendum V for public comment; and allow the process to continue.

There are hundreds and thousands of individuals who would like the opportunity to comment,

whether being for or whether being against Addendum V. By not allowing this addendum to move forward for public comment, we are silencing the voices of many who would like the opportunity to comment on the subject. That is all I have to say, thank you for your time.

CHAIRMAN GILMORE: Robert Brown.

MR. ROBERT T. BROWN: Robert T. Brown; President of the Maryland Waterman's Association. I would like to thank the Technical Committee for their work in preparing this data, and we're looking forward to having a public comment period. We ran into problems when our benchmark was changed, when it was raised up a few years ago.

It just threw us. Less than 1 percent and we ended up with a 25 percent reduction. There is one thing we have to remember; that Mother Nature's going to give us a balance. That may not be what we desire for all fisheries in the Bay. We need a multi-management plan also, because with these predators, these rockfish we have in the Bay, it is spot that they eat on, which has plummeted down.

Also we have the crabs, which have made a rebound, but I don't believe that has to do with the grasses. I just want to thank you all for letting me speak here today. The reason that some of the watermen are not here today, if you haven't noticed the last two weeks the way the weather has been blowing so hard, they haven't been able to work.

I mean today is finally a half-way decent day, and we all have to make a living. Hopefully you will proceed forward with this public comment period. Just remember, we've got to protect more than just the rockfish. If we end up with nothing but rockfish in our Chesapeake Bay, our other fisheries are going to hurt.

CHAIRMAN GILMORE: Patrick.

MR. PATRICK PAQUETTE: Thank you, Mr. Chairman, Patrick Paquette; past President and current Government Affairs Officer for the

Massachusetts Striped Bass Association. I also represent a coalition of angling groups from the northeast; regarding this subject. I just wanted to point out a couple of things that I didn't think were adequately covered during your discussion.

One is that there was reference to the conservation measures that have already been taken toward the 2011 class in the Bay. That is only partially true, because according to the science, those reductions were not met. The reductions that were successful in the overall previous addendum were carried by the coastal fisheries and our achieving and over achieving the cutbacks in our fisheries. But down in the Bay they did not meet the reduction that they were required to.

Let's please remember that. That we've already paid for some of that and we don't want to pay for any more of it. We would like it to be equal shared paying it. I think Mr. Grout got along there. But the Bay did not meet the reduction. Effort, the effort projection regarding this 2011 year class should not be blown away in the projections.

It was very clear from the TC that the increased effort that is guaranteed to happen, with more availability along the coast, is not projected. As bad as the projection numbers look, it is going to be worse. But that is clear to those of us that are in the fishery. Along the coast we are going to catch more than what is projected.

Next, the 2011 year class, a fishery cannot be built and maintained on one single year class. Reports from Rhode Island and Massachusetts are a little bit concerning to me; because there is a window of the way the migration reaches New England states. What happens is the really smaller fish tend to show up, and then it's always normally three, four weeks until the first keeper. That is not what we have seen this year.

In both the West Wall and the first keeper, the West Wall in Rhode Island being like sort of the traditional place that people monitor for when the fish are up in Rhode Island. The first keepers were reported at the Salt Water Edge in

Narragansett, exactly three days after the schoolies showed up.

In Massachusetts, on Cape Cod, the first keepers were caught within two days, and worst of all in Martha's Vineyard, which usually sees the smaller sublegal fish for a good six to eight weeks prior to the first keeper showing up. It was the same day that the fish arrived at all that the first keepers were caught.

What that tells me is that there is a big giant hole of years and a lot of small fish prior to the 2011 that aren't there; the year class that is after 2011 are not good and the year classes before we know that story, because they triggered the last reduction. To build a fishery on 2011 and to not be ultra conservative with it is just irresponsible in our opinion.

Also, I would like those of you who love to look at the MRIP data to take a good long look, because what is being reported about the Chesapeake Bay charter fishery is not matching what that fishery is saying on the internet, what they're advertising and fish reports tools are saying, and the MRIP data is clear that catch and number of trips in that fishery are on the rise. Things are getting better there already, without an action. An action is not required. You should consider the next action after the next benchmark.

MR. ARNOLD LEO: I am Arnold Leo; and I am an element of the socioeconomic sector of this fishery. I speak on behalf of the fishing industry of the town of East Hampton. We have very significant commercial and recreational elements in this fishery. It seems to me over the years, and I can't even remember how many decades I've been doing this with striped bass.

We're always getting a reduction, which is very rarely leading to an increase when things begin to look better with the abundance of the stock. It seems to me that there is at least enough evidence to warrant allowing this to go out for public comment and allow yourselves to hear from the socioeconomic element of the fishery. Thanks.

CHAIRMAN GILMORE: Thank you, Arnold.

CAPTAIN ROBERT NEWBERRY: Thank you, Mr. Chairman, my name is Captain Robert Newberry; I am Chairman of DelMarVa Fisheries Association. We represent those on the DelMarVa Peninsula; not only in the commercial entity, but also in the recreational and in the charter industry. One thing I want to say.

I've been in the charter business 35 years of my life, and on the Chesapeake Bay and in Massachusetts. I learned to fish in Massachusetts during the summers. What we're seeing in the Chesapeake, yes last year was probably the worst year that I had ever seen; as far as catching of fish. I don't know where these numbers that granted they may be putting it on the internet. But the old saying is believe none of what you read, half of what you see, and all of what you do.

In respect to my fellow fishermen from Massachusetts, I think that needs to be taken into consideration. The fact is we had people traveling as far as 30 to 40 miles a day coming to the northern reaches of the Bay to catch fish. Because when I moved my business down to the southern reaches of the Bay eight years ago, three years ago it took me 300 fish to catch to put a limit of 12 in my cooler, because the fish were 18, 18.5, 19, 19.5, so by moving to the northern reaches of the Bay I alleviated that problem.

Fortunately I have some property in the northern Bay and I was eligible to do that. But this year specifically, we're in a bad situation too. I've had to cancel the majority of my trips because the availability of the spawning fish. These fish spawned early, as early as the end of February, beginning of March.

I've run 12 trips and I've caught 18 fish. A lot of my guys leave the harbor, fish eight, ten hours, have maybe one pull down, and one fish. It is not the fact that the fish are not there, they've spawned and they've gone. But on the other hand DNR, our department is seeing record numbers of large spawning cows in the reaches of the Susquehanna.

The fish are just not there. They left, we missed them; and that is because of Mother Nature. I think a lot of what we're seeing in these numbers of fish, are where the fish are spawning. They're short spawning. They're going to different areas. I mean it's like they say all the big fish leave the Bay. Well, last summer there were a lot of large fish, just large fish were caught.

We do have a resident school of large fish that maintain in the Chesapeake, but a lot do go up to Massachusetts. Now I've talked to some people this week, for instance on the headwaters of the Hudson River up at Lake Champlain. They're catching huge fish right now. Connecticut River they're catching big fish.

Have these fish missed Maryland? No, most of them are heading up the coast; the surf people in the coast off of Ocean City are catching a lot of fish. You know they're three weeks ahead right now. With Addendum V, I think to bring it to public comment. You know fortunate I was able to come here today. I do have someone running my boat today, because this is a passion to me.

To not have the public comment on this and not to adopt this addendum. I see what the fishery does. I'm out there every day. Fortunately, a lot of the people in the room here are not able to do that. I'm seeing more rockfish than I have ever seen in my entire life in the Bay right now, little ones that are going to grow. I mean I do refute some of the young-of-the-year index and how they do that; but that is for another time another date. But I would implore this Board, and not to offend anybody on here, but I kind of have a saying that I've earmarked. The politicizing of a natural resource is the damnation of that resource.

I mean the technical group has done a very good job of presenting these issues, and to throw personal agendas and politicism, because I don't like this person, I don't like that person. This state doesn't like that state. It is for the betterment of the fish, and that is why I think

that we need to go forward with this public comment.

We need to address this; because I just don't want to see us get into a situation in the Bay where we have a bio crash, where we've missed something and all of a sudden bam! All of a sudden more fish show up than we know what to do with. Then bottom line, the only one that suffers is the natural resource. I thank you very much.

CHAIRMAN GILMORE: Okay I'm moving back to the Board, any comments? Go ahead.

MR. DAVID BUSH: Maybe a kind of mixed bag between questions and comments. But if I understand correctly, we have the stock assessment that will be coming up in 2018 and then subsequent management measures might fall. If anybody can help me, what will be the earliest those might hit the ground — or the water I should say?

MR. APPELMAN: The benchmark is scheduled to be completed at the end of 2018, which I believe the Board review of that would be early 2019, which would be the earliest. February would probably be the earliest point you could take action following the assessment.

MR. BUSH: What we're looking at is potentially two and a half, three years before any assessment might change, make an increase or decrease or any availability of harvest. I think at this point, I mean there may be a lot of mixed opinions about what the correct action is to go at this point.

But it seems to be obvious that this has impacted some folks; and all they're asking us to do is consider it. Let us have some time to public comment on it. Let us get some more facts, some more data. Nothing on this, if we made any decision and even approved it in August, would happen before 2018, before that stock assessment or benchmark stock assessment would occur.

In which case I'm sure there are several safeties to say look, we put something in place. Now we know it's a bad idea and we can call it. It is just my opinion at this point, now granted, I'm going to have to discuss this further with my peers. But we're not taking any actions today; we're simply considering them for the future.

CHAIRMAN GILMORE: Okay, Doug.

MR. W. DOUGLAS BRADY: Just a follow up on David's comments. I just want to get clear here. If we followed the process on this addendum and went to the public comment period and took action. That action would be implemented in 2018 at the earliest, and if we waited for the stock assessment and took action, whatever came out of that measures could be implemented in 2019. We're looking at, back to Ritchie's comment. It's a one-year difference that there would be between waiting for a stock assessment and doing action from that or going through this process. Am I clear on that?

CHAIRMAN GILMORE: Yes that's roughly, give or take a few months, yes. John Clark.

MR. CLARK: I just have to question that timeline, Mr. Chairman. If the assessment isn't released to the Board until late 2018, there is no way we're going to have the assessment and a new addendum approved in 2019 for action in 2019. It will be 2020 at the earliest, before there are any actions taken on the benchmark assessment.

CHAIRMAN GILMORE: Yes, John, again that is depending upon how fast the Board can move. But you're probably right; it would probably take us that long. Mike.

MR. LUISI: I'll agree with John. We started this action back at the annual meeting in Florida, which was about 18 months ago. That is how long it's taken us to do an assessment update, and consider the information and draft an addendum. I just want to make sure it's clear that I doubt that 2019 would be the first time that we would be able to take action.

CHAIRMAN GILMORE: All right Marty, you get the last shot; then we're going to caucus.

MR. GARY: Just quick clarification. The Addendum V, if it were to pass, would it be possible for that to be implemented in fall of '17?

MR. APPELMAN: If the Board took final action in August, and states could go through their processes then yes. But if not, I think many states need some time with that as well. It could be as early as January, 2018.

CHAIRMAN GILMORE: Okay, I understand and this is about as difficult as it gets. We're faced with, I think everybody understands the issue with the Chesapeake and the industry, and everyone is concerned about that and the stock being so close to significant changes maybe in the not too distant future.

At that note, I think we're going to take a three-minute caucus. You guys can talk, we'll come back and we'll call the vote. Okay if everybody could grab their seats. We've had several requests for roll call votes, John Clark. Anyway, we'll be doing a roll call vote, so is everybody ready for the question? Okay Max will call the roll.

MR. APPELMAN: North to south starting with Maine.

MR. TERRY STOCKWELL: No.

MR. APPELMAN: New Hampshire.

MR. WHITE: No.

MR. APPELMAN. Massachusetts.

MR. RAYMOND KANE: No.

MR. APPELMAN: Rhode Island.

MR. GIBSON: No.

MR. APPELMAN: Connecticut.

SENATOR CRAIG A. MINER: No.

MR. APPELMAN: New York.

MR. JOHN McMURRAY: No.

MR. APPELMAN: New Jersey.

MR. RUSS ALLEN: Yes.

MR. APPELMAN: Pennsylvania.

MR. ANDY SHIELS: No.

MR. APPELMAN: Delaware.

MR. CLARK: Yes.

MR. APPELMAN: Maryland.

MR. LUISI: Yes.

MR. APPELMAN: District of Columbia, Potomac

River Fisheries Commission.

MR. DAVE BLAZER: Yes.

MR. APPELMAN: Virginia.

MR. O'REILLY: Yes.

MR. APPELMAN: North Carolina.

DR. DUVAL: No.

MR. APPELMAN: National Marine Fisheries

Service.

MR. DEREK ORNER: No.

MR. APPELMAN: U.S. Fish and Wildlife Service.

MS. SHERRY WHITE: No.

CHAIRMAN GILMORE: The motion fails, 5 in favor, 10 against, no null votes and no abstentions.

### REVIEW AND CONSIDER APPROVAL OF 2018 ATLANTIC STRIPED BASS BENCHMARK STOCK ASSESSMENT TERMS OF REFERENCE

CHAIRMAN GILMORE: Okay, we need to move on to the next item of business; which is the Benchmark Stock Assessment Terms of Reference. Katie Drew is going to do a presentation for us.

DR. DREW: Just to refresh the schedule in everybody's mind. I think Max touched on this briefly. Here's our benchmark assessment timeline. We've already had our data workshop planning call webinar. Hopefully today we will have the Board approval of the TORs, which gives us the framework to start moving forward with the assessment. We plan to spend the first year, so basically through 2017, working on developing the model with data up through 2016.

That will give us time to test the model, test any new development or structure, and have an assessment workshop at the end of this year to look at that. Then we plan to have another assessment workshop in the middle of next year; which will give us time to incorporate the new 2017 data into the assessment, so that we can go to peer review with the data through 2017, sometime in early December, so that the results will be available to the Board for review in February.

As I said, today we are going to hopefully approve these TORs. Basically, as you all know, the terms of reference for the stock assessment are a way to give us framework and guidance to help us identify important issues that need to be considered as part of this assessment. But it's also important for us to kind of keep this a little bit flexible and open, so that we are not bound to something that turns out it's going to fail.

The ASFMC external review process, which is what we're going through this time, requires two sets of terms of reference; one for the Stock Assessment Subcommittee to guide our model development process, and one for the reviewers

to guide their review process. I'm going to go through these fairly quickly, and try to highlight what the TCs intention is behind some of this language; in the hopes that it allays any concerns that the Board has, in terms of the development of this assessment.

Starting with the Stock Assessment Subcommittee set the terms of reference. TOR1 and 2 are really focused on the data. We used a lot of fairly standard language in this, so I'm going to try to focus on things that are new or special for striped bass. But TOR1 is just focused on investigating all the sources of data, identifying strengths or weaknesses, and discussing how that impacts the assessment.

This includes the fishery independent and dependent datasets, life history, tagging data, indices of abundance and that sort of thing. TOR2 is focused on estimating the commercial and recreational landings and discards; including characterizing the uncertainty of the data and the spatial distribution of the fishery. What is special for this assessment is of course we plan to have the new MRIP estimation of striped bass in this assessment, as well as the calibration effort that's going on.

As you may or may not be aware, MRIP is going to update how they estimate effort; when they're transitioning from the telephone survey to a mail-based survey that has a better response rate, a better estimate of effort. But that is going to change the estimates of total catch for a number of our species. We anticipate striped bass will be one of them. However, we plan to have those new estimates ready to go for the assessment, so that the assessment can incorporate the best available science on that issue. The TOR3 is focused on the statisticalcatch-at-age model, and we are going to be trying to develop and estimate an age-based model that can estimate annual fishing mortality recruitment, total abundance and spawning stock biomass for the time series; as well as estimate their uncertainty and perform the standard retrospective analyses.

But we also would like to be able to provide estimates of these quantities by stock component and sex, where possible, as well as for the total stock complex. By stock component, we're really talking about what we consider sort of the major producer stocks within the coastwide meta-population; which includes the Chesapeake Bay stock, the Hudson River stock, and the Delaware Bay stock, as well as looking at any new data that we have for the North Carolina component of this.

We would also like to do this by sex. However, we do include the where possible caveat here, because it is really going to depend on the quality of available data; not just for the most recent years, but for the entire time series. TOR4 is about the tagging model, where we have an extensive set of tagging data to estimate mortality and abundance.

We use that to really complement the work that is done through the statistical catch-at-age model. We've done a tremendous amount of work in the past trying to merge these two data streams together, and that has not really worked out for us; so they continue to be separate models. I think certainly we'll revisit that question, but for now they are separate models and sort of intended to complement each other.

As well as we would like to continue to provide suggestions for the further development of this dataset and this model to make it more complementary, and to help it support our management process better. I'm sure this is the one that everybody is interested in. TOR5 and 6 are focused on the biological reference points, and the TACs.

TOR5 is update or redefine biological reference points, which include point estimates or proxies for BMSY, SSBmsy, FMSY, and MSY itself. We currently use a proxy for these quantities; but this opens up the possibility of using these estimates themselves, using a different definition of a proxy, and we would define stock status based on these BRPs, again by stock component where possible.

We'll touch a little bit more on this on the next topic. But we know there is interest in the Board in redefining these reference points; and that's definitely an important component of this stock assessment process. We will be looking to you guys for further guidance on what reference points to use. But I think for the TORs we want to keep it just vague and open at this point; until we get better guidance from you guys.

TOR6 is to provide annual projections of catch and biomass under alternative harvest scenarios. This is a pretty standard estimate and report annual probabilities of exceeding these threshold biological reference points for F and for SSB, and under different harvest scenarios. TOR7 is just focused on future work.

Review and evaluate the status of our research recommendations, come up with new research recommendations, and recommend the timing and the frequency of future assessment updates and the benchmark assessment process. Those are the TORs for the Stock Assessment Subcommittee. For the peer review process it is essentially the same wording, but instead they will focus on evaluating of the datasets, evaluating the methods used to estimate the commercial and recreational discards, evaluate the uncertainty in the new MRIP estimates of catch.

Evaluate the methods and models. There is really focusing on evaluating the work that we have done. Again, evaluate the tagging model. Evaluate the choice of reference points and the methods that we use to estimate them. Recommend the stock status determination based on what we present; or if appropriate, specify alternative methods or measures.

Again, evaluate the annual projections of catch. The review panel will also provide research recommendations and recommend frequency of timing of the next benchmark assessment; and then write their own report, to be completed within four weeks of the workshop conclusion. I'm going to pause here for questions about the TORs, to make sure that I think this addresses people's concerns about the direction of the

stock assessment. See if there are any edits that you guys want to make to those.

CHAIRMAN GILMORE: Questions for Katie? John Clark.

MR. CLARK: Thank you, Katie. Maybe you'll go into this the next part. But just when you were talking about the proxies, you said you were going to use a different definition of a proxy? Would you be explaining that more?

DR. DREW: Sure. At this point with this TOR, and at this point in the process, it is extremely open whatever the future reference point will be. Right now we use the '95 value as the target, or as the threshold, and another value as the threshold that we could move those up or down as a proxy, if we like the empirical based as opposed to a model base. But again that is something we're going to look to the Board for guidance on. But that is what that is referring to.

MR. O'REILLY: Thank you Katie, I have two questions. You said it yourself how difficult it's been over time to juxtapose the tagging data with the model; whether it was VPA or now statistical-catch-at-age. Is it really something else that can be done? In other words, the tagging data might have applicability for TOR2, maybe for some distributional aspects.

But the track record on the tagging data is, I mean some really bright people working on the Tagging Subcommittee over the years, but never could get a corroborative fix between the model and the tagging data. That's one question. The other question is very simple. You mentioned in TOR5 updating the biological reference points and I assume part of that will be looking at natural mortality rate.

DR. DREW: Yes. I guess the first part of your question, getting the tagging data. It has always been supportive of the statistical-catch-at-age model, in terms of total mortality rates. They're actually saying very similar things about the total mortality rate. Some of the disconnect comes between how you're handling natural mortality within that.

Hopefully, we may be able to get some spatial information or migration rates out of these datasets. But it's true that this isn't the first time we've tried to answer this question. I think it's still an important component of data that we need to evaluate for this process. But can we take the next step with it, in terms of enhancing the statistical catch-at-age model? It's unclear at this point, but we certainly want that consideration to be on the table. In terms of natural mortality that would be part of the overall life history information going into both the model, and the reference points coming out would be looking at natural mortality at age, potential changes over time and things like that.

#### CHAIRMAN GILMORE: Mike Luisi.

MR. LUISI: I appreciate your expansion of TOR3, as it related to the producer areas. Something that we certainly have an interest in is the evaluation of the age-based model on, we use the term resident stock; and resident stock would be those fish that have yet to become part of the migratory stock.

I just want to be clear in that as we proceed. You didn't use the word resident stock, but I'm assuming that it's those areas, Chesapeake Bay, Delaware Bay, Hudson where we have the young fish that have yet to become mature, and you'll be looking at when available the model would be looking at exploitation of those residents, even without using the word residents.

DR. DREW: Right. Obviously the issue that we've struggled with in trying to incorporate some spatial structure is really that immigration and emigration rate. They do as young ones, they're available in their natal bays and estuaries, and they move out at some point during their life to the coastal population; where they become vulnerable to a different fishery.

However, they also do return to those natal bays and estuaries to spawn, where they're again vulnerable. Separating that kind of movement patterns out in the catch and in the biology is always the difficult part; and I think that is what is going to hold us back. But the intent would be

to look at the numbers and the fishing mortality rates on that component of the larger coastwide meta-population. Track them while they're in the Bay and they're vulnerable to the Bay fishery.

Track the ones that stay in and the ones that move out and join the coast and then are vulnerable to the coastal fishery. But separating them out as these are fish that came out of the Chesapeake Bay and were subject to Chesapeake Bay mortality versus these are the ones that came out of the Hudson River, and are subject to the Hudson River mortality; I think is what we're trying to go for with understanding kind of these complex stock dynamics within the larger meta-population of striped bass on the coast.

CHAIRMAN GILMORE: Any other questions for Katie? Okay we're going to need a motion on this. Oh, go ahead, Mike.

MR. LUISI: Sorry Mr. Chairman, just one last question. I wonder Katie; you know we talked a lot over the years regarding the triggers that have put us in a position to have to take action. If we're going to be considering new biological reference points, we're obviously going to need some evaluation or consideration of potential new triggers.

How those are related, I wonder can you speak to whether or not that is something that needs to be done as a part of this benchmark, or would we have a follow up action once the benchmark is complete and we have new reference points? I think the Board would be looking for technical advice as to how those triggers relate to the new reference points.

DR. DREW: Yes, the TC did discuss this issue; and we felt it was more appropriate to have that analysis and discussion after the benchmark was complete and the reference points have been selected by the Board. Because there is a certain element of risk tolerance in that; so that we would like it to be more of a dialogue, and a back and forth with the Board, in terms of if you select this reference point here is a potential trigger.

Here is the risk associated with it; and how much risk do you want to tolerate? What happens if you have a more conservative reference point versus a less conservative reference point? I think we would be happy to work with the Board on developing more robust triggers, or triggers that reflect a level of risk that you're willing to take. But it would probably be more efficient use of time to have that after the benchmark process, and after we've decided on the reference points that we would like to use going forward.

CHAIRMAN GILMORE: Any other questions? Mike.

MR. MIKE ARMSTRONG: It's more of a statement. I've watched this Board over the years from when I was technical to my career progression; and the Board has never really decided what it wants this fishery to look like. I bring this up as we talk about reference points, because MSY is a commercial reference point.

It maximizes poundage from a fishery, which is not necessarily what you want from a recreational fishery. I just thought I would raise if as we go along, we may not just want to say MSY is where we want to be, and throw that out to the Technical Committee to consider. Because there are many other places we can go with that rather than perform or go forward with what is recognized in fishery science as a commercial reference point. I thought I would throw that out there.

DR. DREW: I have a whole set of slides on that that we'll get to in the next agenda item, actually.

MR. ARMSTRONG: What a good segue way.

CHAIRMAN GILMORE: Segue way, except for Mark Gibson wants to talk now.

MR. GIBSON: Given that we're going to touch on what Mike just spoke to in the next agenda item, I'll wait until then.

CHAIRMAN GILMORE: Okay, I need a motion if it is the pleasure of the Board, because we have to approve the TORs. Does anybody want to offer one? John Clark.

MR. CLARK: Move to approve the Terms of Reference.

CHAIRMAN GILMORE: Can I get a second? Russ Allen. Any discussion on the motion? Is there any objection to the motion? Okay seeing none; we'll adopt that as unanimous consent.

## BOARD GUIDANCE TO SAS REGARDING DEVELOPMENT OF BIOLOGICAL REFERENCE POINTS FOR THE 2018 BENCHMARK STOCK ASSESSMENT

CHAIRMAN GILMORE: Now we can move on to our next item. Katie's going to do a presentation on this, and I think Mike, you did start off the conversation on this. This is kind of food for thought for the future. We can have a little discussion on it, but we really want to get the bigger discussion as we move forward, so Katie, take it away.

DR. DREW: Basically this is, as our Chair was saying, this is not a question that I want an answer to now, today. But it is an answer that the TC is going to look to you guys for over the next couple of months; as we begin work on this assessment, which is basically what types of biological reference points should we be pursuing?

Just as a quick review of the history of the assessment, of reference points that we've used, from 2003 under Amendment 6, we had sort of a mish-mash of FMSY based reference points for the coast and the Chesapeake Bay for F, and then empirical reference points related to the SSB threshold in 1995, as the SSB threshold and the SSB target as a value over that.

In Addendum IV to Amendment 6, we made those reference points line up better. The problem was that the FMSY reference points, if you fished at them, would not get you to your target and threshold. We made them line up, and so that the rate that you're fishing at will get you to your target and your threshold SSB values; given the recruitment history that we've seen in the past.

There were no reference points specifically for the Chesapeake Bay, because the model already incorporated the Chesapeake Bay specific fishery performance within it. But the 2018 benchmark is going to give us an opportunity to really revisit the management and fishery goals for this species; which is what I think is what we've been trying to get at through a lot of this discussion today.

The current biological reference points are based on historical performance that when we put these into management, we were satisfied with the performance in the fishery in 1995. We were satisfied with what the stock looked like, and we wanted to keep it there at or above those levels going forward.

The question now is is this still what the Board wants, or do we have different management goals at this point? Do we want to maximize yield, which as Mr. Armstrong was saying is a historical traditional reference point for a commercial fishery is MSY. Do we want to maximize catch rates, so that you can go out and have a high chance of catching a fish?

Is that what we want? Do we want to maximize trophy-sized fish? Do we want regional reference points or do we want a coastwide reference point? Do we want a less conservative threshold? Do we want that threshold to really represent a threshold that is a danger zone, or do we want it to represent something different?

Do we want ecosystem considerations to be in here? We've talked a lot about what is the effect of striped bass on other species. What is the effect of menhaden on striped bass? Are we ready to start linking some of these things up, and consider the overall ecosystem considerations when we design a reference point?

What we're planning to do, so that is just a taste of some of the questions that we would like you guys to wrestle with over the next couple of months. What we would like to do is have the TC prepare a detailed memo on some of these options, or some of these concepts. I've kind of thrown out a bunch of stuff, but we would like to sit down and prepare some background material and a detailed memo; to give you guys before the summer meeting week, and then put together a Board workshop or subcommittee to start hashing out some of these questions, and decide what you want this fishery to look like, what you want this stock to look like.

When we go forward and develop this assessment, we can develop reference points that reflect the management goals of this Board. I know this is something we've tried in the past, and it's kind of gotten deadlocked in other things. But I think this is a great opportunity, especially given the concerns that have been raised, with the reference points as they are now; to really reevaluate what we want out of this stock and out of this fishery.

As I said, we're not really looking for discussion or input now at this moment. But to give you guys time to start thinking about this, to think about your own states needs and desires, and then to think about this in a larger context and a more structured context at meeting week over the summer. We do have plenty of time before this becomes critical, so hopefully it's not something that we need to do in a hurried fashion, but something that we can do with a lot of thought and consideration to really get at, what do you want this fishery and the stock to look at?

CHAIRMAN GILMORE: Food for thought and I'm not going to open it to questions, so I can gain some time. But I'm sure Katie will be around here. She's not going anywhere.

DR. DREW: No promises.

CHAIRMAN GILMORE: Emerson.

MR. EMERSON C. HASBROUCK: Thank you, Katie. This sounds like a good idea to go forward with. Do you need a consensus of the Board to put that together? Do you need a motion, or are you just going to go forward, pulling this all together?

CHAIRMAN GILMORE: The latter. This is food for thought, at the next Board meeting in August; we'll have a more detailed discussion on it I'm sure. Okay that is the last agenda item we have other than Other Business.

#### **ADJOURNMENT**

CHAIRMAN GILMORE: Is there any other business to come before the Striped Bass Board? Seeing none; I think we're adjourned.

(Whereupon the meeting adjourned at 3:37 p.m. on May 9, 2017.)