PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION ATLANTIC STRIPED BASS MANAGEMENT BOARD

The Westin Alexandria
Alexandria, Virginia
August 5, 2015

Approved November 4, 2015

TABLE OF CONTENTS

Call to Order, Chairman Douglas Grout	1
Approval of Agenda	1
Approval of Proceedings, August 2015	1
Public Comment	1
2015 Harvest Reduction Estimate	3
Fleet-specific Fishing Mortality Reference Points	4
2015 Fishery Management Plan Review	i 1
Adjournment 1	15

INDEX OF MOTIONS

- 1. **Approval of agenda** by consent (Page 1).
- 2. Approval of proceedings of August 2015 by consent (Page 1).
- 3. **Motion to accept the FMP Review for striped bass,** (Page 15). Motion made by Mr. Abbott and seconded by Mr. Emerson. Motion passes unanimously (Page 15).
- 4. **Move to adjourn** by consent (Page 16).

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA)

Rep. Walter Kumiega, ME, proxy for Sen. B. Langley (LA)

Sen. Brian Langley, ME (LA) G. Ritchie White, NH (GA) Doug Grout, NH (AA)

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

Jocelyn Cary, MA, proxy for Rep. Peake (LA)

Bill Adler, MA (GA)

Daniel McKiernan, MA, proxy for David Pierce (AA) Mark Gibson, RI, proxy for Robert Ballou (AA) Eric Reid, RI, proxy for Sen. Sosnowski (LA)

Rep. Craig Miner, CT (LA)
David Simpson, CT (AA)
Lance Stewart, CT (GA)
James Gilmore, NY (AA)
Emerson Hasbrouck, NY (GA)

Katherine Heinlein, NY, proxy for Sen. Boyle (LA)

Russ Allen, NJ, proxy for D. Chanda (AA)

Tom Fote, NJ (GA)

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

Leroy Young, PA, proxy for J. Arway (AA)

Tom Moore, PA, proxy for Rep. Mike Vereb (LA)

Loren Lustig, PA (GA) Roy Miller, DE (GA)

John Clark, DE, proxy for David Saveikis (AA) Craig Pugh, DE, proxy for Rep. Carson (LA) David Sikorski, MD, proxy for Sel. Dana Stein (LA)

Mike Luisi, MD (AA)

Bill Goldsborough, MD (GA)

Kyle Schick, VA, proxy for Sen. Richard Stuart (LA)

Cathy Davenport, VA (GA)

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

Michelle Duval, NC, proxy for Dr. Daniel, Chair (AA)

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

Dan Ryan, DC

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

Ex-Officio Members

Charlton Godwin, Technical Committee Chair Kelly Place, Advisory Panel Chair

Staff

Robert Beal Toni Kerns Mike Waine Katie Drew Max Appelman

Guests

Robert T. Brown, MDWA Rep. Bob Steinburg, NC Pat Geer, GA Wilson Laney, USFWS

Wilson Laney, USFWS
George O'Donnell, MD DNR
Aaron Kornbluth, PEW
Kevin Chew, GARFO
Brandon Muffley, NJ DFW
Jack Travelstead, CCA
Ketih Auston, Jr., MCBA/SCCA

John Bello, VSSA

Doug Ochsenknecht, VSSA

Tom O'Connell, MD CBA
Phil Langley, MD CBA
Frank Abner, MD CBA
Bob Baker, MD CBA
Arnold Leo, NY
Curtis Johns, MD CBA
Meghan Lapp, Seafreeze LTD.
John Carmichael, SAFMC
Greg Drury, MD CBA
Tom Ireland, MD CBA

Christopher Diehl, MD CBA

Harry Neld, MD CBA

Russell Green, MD CBA Eddie Green, MD CBA Ken Hastings, Mason Springs Conserv. John Bullard, NMFS Mark Belton, MD DNR Alexei Sharov, MD DNR Marin Hawk, MS The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of The Westin Alexandria, Alexandria, Virginia, August 5, 2015, and was called to order at 1:15 o'clock p.m. by Chairman Douglas E. Grout.

CALL TO ORDER

CHAIRMAN DOUGLAS E. GROUT: Good afternoon, everybody. This is a meeting of the Striped Bass Board. My name is Doug Grout; I'm the Chair. We have an agenda today which involved getting a couple of technical committee reports; one on estimated harvest reductions in 2015 and then a report of fleet-specific fishing mortality reference points.

APPROVAL OF AGENDA

CHAIRMAN GROUT: Also we will be doing the FMP Review and state compliance reports. I just want to make one change to the agenda. I'm going to flip the order of the technical committee reports. We've decided that it would make for more of a smooth transition if we have the estimated harvest reduction report first. Are there any other changes to the agenda that anybody would like to have? Seeing none; any objections to approving the agenda? Seeing none; the agenda is approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN GROUT: Also in your documents we our proceedings from our May meeting. Are there any comments or changes on the meeting minutes that were provided to us for that meeting? Seeing none; is there any objection to us approving the May 2015 proceedings? Seeing none; they'll stand approved. Before we go into the third item, I'd like to take a little liberty to recognize the former chair of the Striped Bass Board, my predecessor Tom O'Connell.

It is good to see you back here at the commission process. We really appreciate all the work that you've done here with the commission over the years and we're glad to see you back. (Applause)

PUBLIC COMMENT

Item 3 here is for public comment. I have two people signed up for the public comment period. I want to emphasize that this is for public comment on things that are not on the agenda. Obviously, we don't want to take any public comment on the technical reports or the FMP review. The first person I have is Robert T. Brown.

MR. ROBERT T. BROWN: Mr. Chairman, Robert T. Brown, President of the Maryland Watermen's Association. I have two graphs here. Hopefully each state got a copy of it. They are from the Atlantic States Marine Fisheries Commission. When I was going through it for my testimony today, I looked at it and looked where you were back in 1982 to where one goes to 20010 and another one goes to 2013. It looks like we've got a success here.

Just look where we were at then and where we are now. We didn't get there very easily. Back before 1985, before the moratorium, in Maryland we fished on rockfish minimum size of 12 inches and maximum size of 32; 24 hours a day; 365 days a year; no quotas; and fished on the spawning grounds. Today we've got a minimum size of an 18-inch fish, maximum of 36. We don't fish during the spawning seasons. We've got quotas that we meet and we keep.

Back in the early eighties and late seventies I caught more fish in one night than what I'm allowed in an entire season now. As you look at these graphs, I've heard the northern states say before we got this 25 percent reduction last fall and 20.5 on the Chesapeake Bay that they weren't catching any — couldn't see the rockfish up and down the coast.

Well, according to these charts, which are produced by the Atlantic States Marine Fisheries Commission and the technical committee, they are out there somewhere. Well, about three or four weeks when Massachusetts opened its season, within three days our large rockfish, eight pounds and better, want from \$5.50 a pound down to three dollars a pound in a matter of three or four days. That is the volume of fish that are out there.

They are out there; the market showed they're there; the charts show they're there. Fish change their patterns in where they stay at. Maybe during the summer when they're fishing, they go out past that three miles where you can't catch them. Who knows why fish go where they go? They have a head, they have a tail, they go where the feed is.

One of the things we have was when they raised this – on these charts, as you can see in both of the graphs, the level of the biomass is higher now than when the stock declared recovered back in 1995. Addendum IV came in the graph, a closer value, but still the biomass is greater than it was in 1995. We're fishing on a recovered fishery. The cut that we had last year, that 20.5 percent has really crippled the state of Maryland and the Chesapeake Bay.

I don't believe that it was correct that it was done but nevertheless that's what we have to live with. In the state of Maryland, according to the biologists in Maryland, anywhere from 70 to 90 percent of the fish that are caught are male fish. That has nothing to do with your female spawning stock. During the seasons, we have a maximum of 36 inches except for during the trophy season, which the charterboats have.

Well, this year they had to be sealed at a 36-inch maximum size or have a slot limit. A lot of them are — the people who had the party said they wouldn't be back if they had to deal with a slot limit again. Well, they've got a three-week season and they're allowed one fish per person within the slot limit or 36 or more.

However, they say, you know, to do that because those fish are getting ready to spawn, to save them. Well, on the ocean you've got a 36-inch minimum size on most of the coastal states. Well, if you catch them tomorrow or you caught him today or you catch him next week, that's before he spawns the next season. Our charterboats took a big hit last year on it and our sports fishermen.

Hopefully that won't happen again next year. Fishery management is a hard science. It is also a guesstimate. I just would like to say I think we've come a long way since 1982, and we are successful in what we did. We did bite the bullet and we have had to sacrifice. We need to get back on track and get our quotas back where we are.

If you look at the young-of-the-year index over the years, just because the young-of-the-year index or you have a bio-stock or spawning fish, it doesn't mean you're going to have a high index. If you look on some of your lower years, that's when you had your highest young-of-the-year class. I want to thank you for the opportunity of speaking to you today.

CHAIRMAN GROUT: Thank you, Mr. Brown. I also have Phil Langley here.

MR. PHIL LANGLEY: My name is Phil Langley. I'm actually President of the Maryland Charterboat Association. I also sit on Maryland's Sportfish Advisory; and I'm also one of the commissioners on the Potomac River Fisheries Commission. Clearly, everybody here today has a great concern and passion for our fishery; but before I start saying what I have to say, I would like to address everybody at this table and thank everybody sitting here for the extra time and commitment that you exhibit for our fishery.

Representing the Maryland Charterboat Association, our association is fully committed to conserving our resources. However, we are asking this commission to please give additional consideration to the economic impacts to our

businesses as discussions are moving forward. In a downturned economy in recent years, combined with 2015 reductions absorbed in one year, many captains are struggling to stay in business.

The economic impacts to the charter industry this year will be felt in future years for either cost of advertising and marketing expenses to replace lost business from this year. In the bay we have a limited number of species to target, which makes striped bass critical to the livelihood of the charter fleet in the bay.

The latest statistics do indicate that the stock is not overfished and overfishing is not occurring. As stated earlier, we are fully committed to protecting the resource. However, we have a hard time understanding how the reductions we are taking in our summer/fall fishery is protecting the spawning stock biomass when it is heavily skewed towards the male fishery, approximately 80 percent.

In closing, I would like to recognize a group of charterboat captains from Maryland against the back wall, who have taken time out of their day today to come and show up at this meeting as far as to exhibit the importance of this meeting and what it has on their livelihoods. These guys are ambassadors of the Chesapeake Bay. They introduce thousands and thousands of kids to the bay and to first-time fishing, as well as responsible for introducing a lot of recreational anglers to buying their first boat and to continue into the fishery as a sport. That's all I have to say. Thank you and I do appreciate your time.

TECHNICAL COMMITTEE REPORT 2015 HARVEST REDUCTION ESTIMATE

CHAIRMAN GROUT: Thank you, Mr. Langley; and that's the last person I have on the list. We will be moving on to Agenda Item 4, which are technical committee reports. These are both responses to charges that we made to the technical committee. I will turn it over to Charlton.

MR. CHARLTON GODWIN: The first report we're going to have from the technical committee is the 2015 harvest reduction estimate. We will go over this one first and have some time for questions after this. As we know, the board approved Addendum IV in 2014, which established new coast-wide reference points and also required states to reduce removals in order to reduce F to a level at or below the new target.

This was a total of a 25 percent reduction for the coastal states and a 20.5 percent reduction for the Chesapeake Bay states. Of course, the commercial fisheries reduced their removals through the quota reductions. The recreational fisheries reduced their removals through bag limit and size limit restrictions.

Once again, Addendum IV required – you can see the percent reductions for the coastal states and for the Chesapeake Bay states' jurisdictions. We've just got this broken out by each region and each sector just to give you an idea of the reference harvest estimate and then the harvest estimate in 2015 after the reductions.

In each sector you see the percent reduction from the reference harvest; and then the total reduction at the bottom is 25.6 percent. Through the reductions from the various sectors, the states implementing their management measures for recreational fisheries, we were able to reduce to the target level.

The board members also wanted to look at the issue of non-compliance. The technical committee had originally looked at a hundred percent compliance rate for the 25 harvest reductions. This is due to different state-by-state regulations. The really unpredictable angler behavior and weather can have such a big impact on fisheries. The MRIP Survey is not really set up to estimate compliance.

For those reasons, the technical committee used the hundred percent compliance rate. At the board's request, we looked at the non-

compliance harvest in years 2011, '12 and '13. This is looking at the MRFSS data, looking at the numbers of fish, some catch frequency of three fish or greater.

You can see that it varies from year to year, from 4 percent to 15 percent in 2013, for a total of 7 percent. These calculations are based on the historical MRFSS weighting and did not include the new MRIP Re-estimation Methodology. Really, for the first part, that's it for the first three slides. We can take any questions on the reductions on the non-compliance.

FLEET-SPECIFIC FISHING MORTALITY REFERENCE POINTS

CHAIRMAN GROUT: Any questions from the board? Okay, seeing none, thank you very much, Charlton. You can on to the fleet-specific reference points.

MR. GODWIN: The next presentation will be about the fleet-specific reference points. Just to add some background, in the 2013 benchmark stock assessment we used three fleets in the model; the Chesapeake Bay fleet, the ocean fleet and the commercial discard fleet. Just as a reminder, we have this separate commercial discard fleet because the way the commercial discards are estimated based on return rate of tag returns from the various sectors, these commercial discards cannot be separated into bay and ocean removals; so all of those discards from those sectors are modeled as a single fleet.

The 2013 stock assessment recommended and developed new coast-wide reference points for fishing mortality and spawning stock biomass. These biological reference points were developed using a composite selectivity that represented the selectivity of all the three fleets weighted on how much they contributed to the total F over the last five years. Those are the new SSB and F reference points from that 2013 assessment.

Just to give an idea of once again how the total Fs are calculated; we have the discard fleet is the gray bars at the top of each bar. The ocean fleet is the orange in the middle and the Chesapeake Bay fleet is represented by the blue in the bottom. This is just an at-age — the bottom axis is age. This is how the total F at age by fleet is derived.

Once again from the 2013 assessment, the assessment found F was below the threshold so overfishing was not occurring; but it was indeed over the target in the terminal year of 2012. You can see that in the previous ten years it had actually been over the threshold for several of those years. The Striped Bass Board asked the technical committee to develop reference points for the Chesapeake Bay, Delaware Bay and Hudson River.

At our previous meeting we brought back to the board that it was a viable option and within the scope of an assessment update to look at developing a Chesapeake Bay fishing mortality reference point. It was a viable option but not within the scope of the assessment update to try to develop a Delaware Bay reference point.

At this time with the data we have, it is not possible to derive a fishing mortality reference point for the Hudson River using this modeling methodology. Since the last meeting, the technical committee did develop these fleet-specific reference points intended to ensure the impact of each fleet on the total coast-wide population to remain sustainable.

When each fleet fishes at its target reference point, the total F at age on the population will be equal to the coast-wide F target. This is just how each fleet's target and threshold is set. It is the proportion of its full F at age over the last five years multiplied by the coast-wide target and the threshold F at that age. That is just for each one of the fleets, the bay, the ocean, and the commercial discards.

For the reference points that came out of that, looking at the ocean fleet you can see the F

target of 0.141; the threshold of 01.72; and then the portion of the F in 2012 attributed to the ocean fleet's of 0.14. That was actually right at the target where that last column is just a percent difference from the target in 2012.

Once again for the Chesapeake Bay, a much smaller F target, 0.052; 0.64; and the fishing mortality attributed to the bay in 2012 is 0.059. That was actually a little bit over the target but still below the threshold. Then for the last fleet of commercial discards; the F target of 0.019, 0.024, 0.041; and that was over the target in 2012 by 50 percent.

I think it is important again to note, though, that the commercial discards, the way that these are calculated using the tag-return information, is one of the most imprecise estimates we have that go into the model of these three fleets of the harvest. Once again, looking at this graphically for the Chesapeake Bay fleet and the ocean fleet, F in the ocean has declined faster than the F in the bay over the last five years.

A lot of that has to do with the fact that the Chesapeake Bay has an annual quota and their harvest levels remain more constant and the harvest in the ocean can increase substantially based on the year class abundance and just availability of the fish and different economic pressures from year to year.

Some potential management issues and just some things to remind the board to be thinking about; once again, there is a lot of uncertainty in those discard estimates. Discards are primarily regulatory. It has to do with the size limits, closed seasons, quotas and gear restrictions. It is difficult to control that F that is attributed to the discard fleet as strong year classes move through. It is the same as with the discards in other sectors; strong year classes are going to lead to high discards. Looser regulations may shift F to the directed fleet; the restrictions implemented for biological reasons.

The target and threshold for the commercial discard fleet may not really be meaningful for

management. It is not really biologically reference point based. The population could still experience overfishing even with the bay and ocean fleets fishing at the targets if the discard F is not controlled.

Just to go over some more management issues; remember the management triggers that we currently have in Amendment 6, board action is required when the fishing mortality reference points are exceeded. If the fishing mortality threshold is exceeded in any year, the board must reduce F to the target within a year.

If the fishing mortality target is exceeded two consecutive years and the female SSB is below the target in any of those years, the board must reduce the target within one year. This is basically what initiated Addendum IV that was approved last year. Just once again potential management issues to have to consider if we were to use these three F targets for the different fleets; consider changes to reflect the fleet-specific reference point management triggers; and now you have four sets of potential reference points and management triggers to consider if you were to move in that direction. I think with that we'll take any questions.

MR. JOHN CLARK: My first question, Charlton, would be about the discard reference points. Would you just give a little more detail as to how that was calculated and which fisheries you're seeing most of this discarding from?

MR. GODWIN: Once again, I guess maybe this may be the best slide to look at; but that reference point is still calculated as the proportion of its F at age over the last five years and its contribution to the coast-wide target and threshold at age. It is the same methodology for both the bay fleet and the coastal fleet.

MR. CLARK: I think I was just more concerned of which data from which fisheries; if you have any idea of where most of that is coming from. Just based on our experience in Delaware with discarding, it seems like a —

MR. GODWIN: The discards I guess, if I'm understanding your question, the way we calculate commercial discards themselves; that is a function of the number of tag returns from the recreational sector and the number of tag returns from each of the various commercial sectors and the gears.

That ratio of those tag returns to each other is how these commercial discards are estimated. To my knowledge there are no specific observer programs in any commercial fishery to where we're using empirical observer data or anything like that. Nothing from the independent surveys as a proxy for discards; it is just that tag-return-ration model; the same way those discards have been calculated through the years.

MR. MIKE LUISI: Charlton, thanks for the presentation. I read the description and I've seen your presentation about the methodologies used to calculate the fleet reference points. I understand that it was decided by the technical committee to present today to the board the methodologies that you used where you took the F at age from the Chesapeake Bay fleet compared to the total fleet over five years' time to calculate those points.

I also understand that there was an alternative approach that was brought up for discussion at the technical committee for calculating those fleet reference points, taking into consideration a much longer time period, starting back in 1996 to 2012 when management along the coast and in the bay were consistent and similar.

If this is accurate, can you provide some feedback to the board regarding the debate and explain a little bit about the technical committee's rationale only to bring to the attention of the board today the alternative option that used the five-year time period instead of consideration of multiple years outside of that five-year period?

MR. GODWIN: The time frame of years you're talking about were relative to the selectivity patterns that we assigned to these different

fleets. It was just really a consistency issue. We went back and forth and did discuss the longer time frame. The reason we ended up going with the five-year time frame is because it is more consistent with the coastal and what was done in the benchmark stock assessment; more consistent with the coastal reference.

We did look at those and I don't remember off the top of my head the difference that it made. I don't know if we ever even calculated with both methodologies. I don't think the difference in this target reference for each particular fleet – I don't think it would have been much difference using the 12-year selectivity block versus the 5-year selectivity block.

CHAIRMAN GROUT: Do you have a follow-up, Mike?

MR. LUISI: Yes, I do, thank you. Well, I believe that the use – well, it is my opinion that the use of a longer time series would take into consideration a lot of the variable changes that we have seen as stock has grown and has declined. The development of reference points using a five-year period of the F ratio, it is during a time when we've had a declining spawning stock; and it doesn't take into consideration these variable effects on fishing mortality, year class strengths, annual climate variations, effort variability, et cetera, et cetera, et cetera.

If it is a consistency thing that we're talking about, I'm not sure that there is much more – I don't that there is another fishery along the Atlantic coast right now that has as much consistency over the past 20 years leading up to changes we're made than with the striped bass fishery. I would think that this alternative analysis including a much larger, wide-ranging time period would be something that this board would like to see. We'll see how the discussion goes, but I think that's something that would be appropriate to present back to the board at another time.

MR. WILLIAM A. ADLER: Mr. Chairman, I'm referring here to Figure 3, Page 7, the charts.

Excuse my ignorance here; but commercial discard fleet; what is it? I mean is this commercial catches that are thrown back over? Where does that come into play with what they – what is it?

MR. GODWIN: The commercial discards is exactly that; it is composed of fish that are maybe thrown back because they're undersize. It is composed of fish that are thrown back because it is out of the season or the harvest season. We have discards in the recreational sector as well. Most of those discards; they either come from fish that are under the size limit for the particular state or maybe if the angler is over their bag limit and they catch a few. We just don't model the recreational discards separately. They are modeled in with the catch.

Because of the way we have to estimate the commercial discards, we don't have a very way of estimating specifically commercial discards from the gillnet fishery in the Chesapeake Bay or commercial discards from the pound net fishery. Because of the way we have to estimate these discards, there is really no good, clean place to put them; so we just lump all that into one particular fleet and it is modeled that way. These commercial discards; it is really the same way that we've always estimated the discards from the various sectors in the stock assessments.

MR. ADLER: If I may, Mr. Chairman, then the other ones are commercial catches that are not discarded; am I correct?

MR. GODWIN: Correct.

MR. ROB O'REILLY: Mr. Chairman, I, too, have a couple of comments about the ratio of age five full F in the bay and the coast as it pertains to the biological reference points. I think the way I look at that is the last five years, through 2012, if you look at those graphs that were handed out earlier to us at the beginning of the meeting — and I think we already know this; that there is a non-equilibrium situation.

I'm not sure why you would want a biological reference point that was based on that type of information, non-equilibrium. The other part of this, I think Mike covered some of it, but the period from 1996 to 2012, the word "consistency" was mentioned in relation to the five years; but the consistency really is the regulations.

It is also the fact that you have three stocks primarily that are part of that full F on age five that is being looked at for the reference points. The variability of those stocks isn't linear; so there might be one stock more abundant or biomass might be better in one year than another. I think a longer time series at least gives you an idea of how you deal with that variability rather than taking a snapshot of the last five years. I appreciate the time.

MR. MARK GIBSON: Mr. Chairman, I want to follow up a little more on the length of the duration of the window for the computation. The question I have is in the SCA Model you have to set selectivity blocks to the separability assume; and what is the length of the window in the terminal year block?

DR. KATIE DREW: The longer time series that they're referencing, the '96 to 2012, is a single block within the model; so that is a single, constant selectivity block over that time. Obviously, that doesn't reflect the changes in effort that each fleet may or may not undergo.

DR. MICHELLE DUVAL: Mr. Chairman, my question was really about these differences on the slide in the commercial discard fleet. Those are such small numbers when we're talking about an F target and F threshold. Charlton, I was wondering if you might be able to put that into context in terms of something that I think the public could understand whether it is pounds of fish or numbers of fish or something like that. I think it is difficult for the public to grasp that just looking at F targets and thresholds that small in terms of what 52.8 percent difference means. Thank you.

MR. GODWIN: As far as numbers of fish, just to give you some sort of idea of what that kind of F target and referencing just really what the discards have been in that sector; if you look for the commercial discards, they average anywhere from a couple of hundred thousand fish to this most recent estimate was actually one of the highest in the time series to about 900,000 fish.

This is compared to total removals of three or four million fish in some years, to give you kind of an idea of the numbers of that commercial discard. Like I say, those estimates are really the least precise estimates that we have that go into the three different fleet models. That is something that we've kind of struggled with in estimating those numbers through the years.

MR. CLARK: Charlton, I just want to get back to something you said about the Delaware Bay reference points. You said it is a viable option to create reference points but not for an assessment update. Does this mean that you're planning to do those for the benchmark assessment; and prior to the benchmark would you be able to produce anything preliminary just so we could see what they might look like?

MR. GODWIN: I think that's up to the discretion of the board which way they want to go to continue developing those. The reason we kind of said that was a viable option is because, yes, that Delaware Bay – the harvest in that Delaware Bay fleet could be separated out fairly easily and put into a separate fleet in the model. Because it wasn't modeled that way in the benchmark, a stock assessment update, that would be considered a fairly substantial change. I think, yes, if the board wishes to continue looking at that a reference point in the future, I think we can certainly do that.

REPRESENTATIVE WALTER A. KUMIEGA, III: Are there any thoughts or discussion about how to improve the numbers on the commercial discards? I originally was going to ask if there was any way we could possibly reduce that number; but I don't think that number is good enough. I don't think we have enough

information to really ask the commercial fleet or talk to the commercial fleet – and it is obviously more than one fleet. It is a lot of different fisheries. I mean, there is nothing worse than throwing dead fish overboard. If there is a way we can work on getting better information on that, maybe there is a way that can be reduced.

MR. GODWIN: I think really the ideal way to estimate discards from that sector would be to have some sort of observer in those fisheries to actually see what is getting discarded. I think your point to the way we currently estimate those discard estimates, it really would be very hard to actually put in some sort of management tool that then we could look at and say, okay, we've done this and now the discards have been reduced and it is because we did this. I don't think that would work the way we currently estimate those discards based on the tag returns we get from the various sectors.

CHAIRMAN GROUT: Further questions of our Technical Committee Chair from the board? Seeing none; I appreciate the effort that you and the technical committee put in on this. I guess we look forward to the updated assessment at our fall meeting. Mike.

MR. LUISI: Mr. Chairman, this is not a question for the technical committee; but I had another comment that I'd like to make. This issue about Chesapeake reference points is something that is very important to us, especially in the bay states, specifically in Maryland. We've heard from the public today, both the commercial and for-hire fleet.

The recreational fishermen in our state and in the bay also feel that this is a very important issue. I want to remind the board that this objective was part of the original development of Addendum IV back two years ago. Getting to the point where we are today, we were able to see the development of these reference points, which I have to applaud the technical committee for the work as well as ASMFC staff over the last years. I know it has been a very tall order to fill.

Just the showing today of our charter fleet and also the Secretary of the Department of Natural Resources for Maryland, Mr. Mark Belton, is here in attendance with us today to show his support for our continued efforts to move this forward to develop this more fully. I think the board needs to see what I have suggested as another way of looking at reference points for the fleets, taking into consideration a longer period of time and the variation in time that would go into the development of those reference points.

Mr. Chairman, I do have a motion prepared. I did not have a chance to give it to staff prior to this discussion; but if you're okay with that, I can make a motion or suggest what it is we'd like to see the technical committee do in preparation for the annual meeting.

CHAIRMAN GROUT: If you'd like to bring that up as to what you're specifically suggesting, we can see if there is a consensus from the board about this. If there is discussion, then maybe it would be better put into a motion. Try it first as discussion about a specific charge to the technical committee.

MR. LUISI: Thank you for that, Mr. Chairman. The purpose of what we'd like to see would be to direct the Striped Bass Technical Committee to prepare for the board an evaluation of the various methodologies of calculating the F ratio and fleet reference points, which includes not only what they calculated with the five-year time period but inclusion of the 1996 to 2012 time series; present that back to the board with potentially pros and cons of each and an analysis or an assessment of whether or not each one of those options, I would guess we'd call them, are relevant and appropriate for management use to allow for it to maintain a stock at a sustainable level.

I feel that the decision to go with the five-year time series versus a twenty-year time series based on consistency with the previous assessment is not a technically driven decision. I think the decision to which time frame is being used should be a decision made by the board. I would like the board to have all of that information in front of them as well as the assessment update information that I'm aware is taking place as we speak at the annual meeting so that we can have a debate and discussion as to whether or not we move this forward in the form of an addendum for the adoption of these reference points.

Right now given what I've seen and the questions that we've had around the table, I'm not sure that we're at the point today that we should be initiating an addendum without the full inclusion of the different methodologies and options that were used for calculating reference points. Thank you.

CHAIRMAN GROUT: Charlton, you had a comment about his request.

MR. GODWIN: I just wanted to make one comment just before the board discusses this. If we do look at the 12-year selectivity block; that would also require a recalculation of the current coast-wide F target and threshold that we currently have. In order to be consistent, we would have to recalculate that as well. I just wanted to let everybody know that is what would have to happen.

CHAIRMAN GROUT: I guess my question from a policy standpoint, usually we have updated reference points during a benchmark stock assessment. We have just been through that and the plan this year and as we've been moving forward, it is certainly a turn of the crank.

It is something to consider if we do look at trying to potentially consider modifications of the reference point; that is beyond the scope of the updated stock assessment right now. That's something to consider as we consider Maryland's request here of the technical committee. Do we have any discussion on this? You've heard Maryland's request to have an additional time period looked at in developing fleet reference points. Any discussion on that? Ritchie White.

MR. G. RITCHIE WHITE: I guess a question for the technical committee as to the amount of work involved in this and what workload they presently have and how this might impact that.

DR. DREW: The work of recalculating all the reference points, considering that we have a methodology that the technical committee has accepted and now it is merely a question of time periods involved for both the coastwide and for these fleet-specific reference points, it would not be an outrageous amount of work. I think it is something we could accomplish before the next meeting and be able to present that along with the update information if the board is so interested.

MR. O'REILLY: I'm glad to hear Katie say that because I think this is very important. It is a large step that we had hoped back in October of 2013 would have been done a lot earlier. There are no complaints about the timing; it is just that we keep waiting. I see the table up on the screen and that I would take as an illustration because that places ocean and bay and commercial discard reference points there.

I'm not certain that this isn't a better time, having done the benchmark stock assessment, to allow everyone to see what the changes are because, of course, there would be changes. If there is a difference from the 1996 to 2012 basis for the reference point, then it is going to have some changes in the ocean as well.

I think the points made earlier are at least not from the inter-workings of the model as such, but the fact we are looking at multiple stocks and we looking at not a very minor component of producing the Chesapeake Bay reference points when we look at that ratio of full F on age five in the bay and coast. I hope we can go forward to the annual meeting, have the type of information that Mike Luisi mentions, go through a discussion and vet then go forward at that level. I appreciate the time.

MR. GIBSON: I certainly don't object to the examination of the longer window of time, particularly in respect to the answer to my question on the model configuration and selectivity block. I would just hope that the technical committee — and they're probably already thinking about this — would pay close attention to the stability of the F ratios in the different time blocks, what the variation looks like under this five year versus twelve year, whether there are time trends or obvious breaks to blocks in the F ratio series and think about that in terms of the pros and cons.

CHAIRMAN GROUT: Anymore questions? Bill.

MR. WILLIAM J. GOLDSBOROUGH: Mr. Chairman, two quick things; one, a clarification. I don't believe it is a 12-year time frame we're looking at but 12 years beyond the 5, so it is actually a total of 17 versus the 5 that was used. I guess I would just make – sort of stepping back from it a second – a broad observation.

It seems to me all things being equal that our technical datasets tend to be more powerful for us the long they are. It seems to me especially over this time period we're talking about where we've seen quite a variation in the stock and fishery that it would be a richer dataset as well taking this whole 17 years. It seems it would yield more robust estimates.

DR. DUVAL: Mr. Chairman, I agree with Mark Gibson's comments in regards that I have no objection to looking at a longer time frame. I'm certainly sympathetic to the bay states' jurisdictions regarding having some reference against which to measure the impact or success of their management measures.

I think some of my only concerns, as we continue to discuss this, is really – and this was brought up at the last meeting as well – is some consistency in management given that we have just had a benchmark stock assessment, that given sort of the pain that we just went through to implement some decreases in available quota.

I guess maybe just sort of philosophically, it seems like we're sort of tied up between fleets that we have in our existing model based on selectivities along with a desire to actually have an assessment that's really based more on stocks. We have this bay fleet that is not necessarily the Chesapeake Bay stock that presents a little bit of a conundrum, but I think everyone would like to work towards perhaps a future term of reference and a future benchmark assessment that would allow us to get to those types of stock-specific approaches.

I understand that we don't have the information there. It is a bit of a long ramble. I just have some concerns about consistency in management given what we've just gone through, but I certainly don't object to Maryland's request.

CHAIRMAN GROUT: Seeing no other hands; is there any objection to tasking the technical committee with the task that was requested by Maryland? Seeing none; you have been tasked, Charlton; more work. Again, thank you very much for the efforts the technical committee has put in on this issue.

2015 FISHERY MANAGEMENT PLAN REVIEW

CHAIRMAN GROUT: Our next item on the agenda is the FMP review that we need to approve and also state compliance. I will turn it over to our new plan coordinator, Max Appelman.

MR. MAX APPELMAN: Again, for those of you I have not formally met, I am Max Appelman. I am the FMP coordinator for striped bass. I will be walking through the 2015 Striped Bass Fishery Management Plan Review. A brief little overview; we will cover the status of the stock; also the status of the fishery; status of management measures; and then wrap up with compliance and plan review team recommendations.

A brief reminder to the board that this is a review of the 2013 and 2014 fishing seasons. Basically

Amendment 6 and Addenda 1 through 3 set the management, regulations and monitoring requirements for those fishing seasons. Addendum IV wasn't implemented until and so that will be covered in next year's FMP review of the 2015 fishing season.

Based on results of the 2013 benchmark stock assessment and the recommended biological reference points that are listed here in this table, the Atlantic striped bass stock is not overfished and overfishing is not occurring. If you take a look at this figure here, this is of spawning stock biomass from 1982 to 2012, which is the terminal year from the last stock assessment.

Basically the take-home here is that spawning stock biomass has declined over the last decade or so and was estimated at just over 58,000 metric tons in 2012, which is below the target and just above the threshold. This figure is showing the fishing mortality for the same time series. Again, the take-home here is that over the last decade or so fishing mortality has been fluctuating across that F threshold and in 2012 was estimated at 0.20, which is below the threshold but above the target.

This table here is summarizing Tables 3 and 4 from the FMP Review, which went out in board materials. Instead of reciting all these numbers here, I'm just going to highlight a few of them. It has also been brought to my attention that these numbers in red might be sending the wrong message. I'm not trying to insinuate anything negative here. I'm just trying to help out with my presentation; so please ignore the red.

Essentially total harvest in 2014 was roughly 30 million pounds and 2.5 million fish, which is a 7 and 12 percent decrease from 2013; also pointing out that commercial landings in 2013 and 2014 were relatively similar with 5.9 million pounds landed in 2014, which represents 20 percent of total harvest and sort of indicates that striped bass harvest is predominantly from the recreational sector.

Another point I wanted to make was that in 2014 60 percent of commercial landings came from the Chesapeake Bay fisheries. This next table is showing coastal commercial quotas for 2014. Essentially one state had a reduced coastal commercial quota due to overages in 2013; and all states harvested under their coastal commercial quotas in 2014 and therefore no deductions had been applied to the 2015 quota.

This next table is a summary of Tables 5 and 6 from the FMP Review for the recreational fisheries. Just a couple of highlights here; the recreational fishery harvested approximately 1.8 million fish in 2014, weighing 24.1 million pounds, which is roughly 80 percent of the total striped bass harvest by weight; and again pointing out that much of the total harvest is from the recreational sector.

This next figure is showing total recreational catch; so both fish harvested and fish released, while the dotted line at the top of the figure is showing the percentage of that released catch towards the total. Basically over the past decade total recreational catch has decreased and so has the percent of catch released. That was estimated at 80 percent in 2014; and this could indicate that anglers are keeping more fish or are catching fewer sub-legal fish.

Moving on to the Chesapeake Baywide quota in 2014; in summary here each fishery harvested under their respective quotas. Total removals were estimated at 7.3 million pounds and were split relatively equal between the commercial and recreational sectors, with 3.6 million pounds landed in the commercial fishery and 3.7 million pounds in the recreational fishery.

Continuing on now with the Albemarle Sound and Roanoke River striped bass stock, based on results of the 2013 North Carolina specific benchmark assessment, the Albemarle Sound and Roanoke River striped bass fishery is not overfished and overfishing is not occurring; very similarly to the stock status of the Atlantic coastwide stock. In 2012 the fishing mortality was estimated at 0.34, which is just above the target

and below the threshold, while spawning stock biomass was estimated at 835,000 pounds, which is also between target and threshold.

Also, the 2014 harvest was roughly 122,000 pounds; 28 percent of that came from the Roanoke River Management Area and 72 percent from the Albemarle Sound Management Area. Moving on to the status of management measures, under Addendum II the technical committee annually reviews juvenile abundance indices or JAIs from six different surveys to monitor recruitment failure.

Here it is defined as a value that is lower than 75 percent of all values in the dataset for three consecutive years. During this 2015 review, the technical committee evaluated 2012, 2013 and 2014 JAI values; and no states met the criteria for recruitment failure in 2015. Under Addendum II all states with commercial fisheries are required to implement a commercial tagging program and submit a monitoring report no less than 60 days prior to the start of their first commercial fishing season.

Some of the pieces of information that are included in this report are the number of tags that are going to be issued for the upcoming season and account for tags from the last season; changes to tag appearance; orientation of the date or the color of the tag, for example. Also, any changes to how the program is implemented or any other issues that merit being brought up that should be addressed.

It is important to note that not all states submitted these monitoring reports as described in Addendum III; and so the plan review team sort of had to track down the necessary information for this review. However, the PRT did find that all states had implemented commercial tagging programs consistent with the requirements of Addendum III. Please refer to Table 10 in the FMP Review for a description of each state's commercial tagging program.

Moving on to compliance and recommendations; the plan review team did find

that all states had implemented regulations consistent with Amendment 6 and Addendums 1 through 3. Since not all states submitted their commercial tagging reports, the plan review team does recommend that all states submit those reports as described in Addendum III to Amendment 6. Lastly, the plan review team recommends the board accept this 2015 Striped Bass Fishery Management Plan Review. Thank you, Mr. Chair; I'll take any questions.

MR. ADLER: On Page 29, Table 4, help me understand. It says commercial harvest and the total is 766,298 for 2014; and they had dead discards and they have that at 931,000. Does that mean they harvested 766,000 and threw over dead 931,000? That was one question. Now, over on Table 7, recreational, I sort of see this one where it says recreational releases, 7 million; dead discards estimated at 655,000. I don't understand how Table 4 can have more dead discards from the commercial than they caught. Am I misreading this?

MR. APPELMAN: You're correct; those are fish that were thrown over dead. This might be a better question directed to the technical committee, but it goes back to those tag returns from the commercial and recreational fisheries and coming up with an estimate of commercial discards. Also with the recreational dead discards, that is a percentage which is applied to the MRIP data that we get. We apply a 9 percent post-release mortality estimate to the total recreational harvest to get that number in Table 7.

MR. ADLER: If I may, Mr. Chairman, okay, I understand you do a percentage for dead discards in the recreational fishery. I understand that and those figures sort of – they say, okay, you know, they discarded a lot and some of them died, okay; but Table 4 on the commercial one, it seems out of whack that they would estimate that the catch was 766,000 and they threw over dead more than that. That sort of like doesn't fit.

DR. DREW: Those are two separate numbers. To get the total commercial removals in this case,

you would actually add them together. We're saying 780,000 of them were reported harvested and we estimated that in addition 900,000 were discarded dead. If you look back, you can see that's actually the highest number we've had in a long time; so I think there are two issues.

One is that this number is fairly uncertain so it is difficult to estimate so that probably there is a lot of uncertainty around that actual number. The other thing to keep in mind is that the 2011 year class is now moving into the fishery; and so you probably have a large number of fish that are available to the gear but not legal harvest size.

We would expect dead discards to increase during this time period as the 2011 fishery recruits to the gear but is not legal to be harvested yet. As you have more and more of those small fish around, people are going to have to throw more of them back. I think there are two things that are going into that really high number that we're seeing for the most recent year.

MR. ADLER: Okay, so in other words we're not talking about discards by the commercial fleet that swim away. We're talking about some of them apparently swam away but more of them died than swam away according to these figures.

DR. DREW: They're two separate numbers. The total harvest is the total amount that is reported harvested. The dead discards includes – it does include a mortality correction; so we don't assume that everything thrown overboard dies. We assume there is a proportion – depending on the gear, a certain number of them will survive and a certain number of them will die; but that discard number is based completely separate from the number that is reported harvested. You would have to add those two together to get the total number of fish that the commercial fishery killed in 2014.

MR. ROY MILLER: Mr. Chairman, I just have a quick correction to Table 8 that is on Page 33 where it has Delaware harvest in 2014. I believe the number that is shown there of 14,894 was in

fact the number of fish and not the pounds. That should be corrected. Thank you.

MR. O'REILLY: Mr. Chairman, just a friendly edit; and I guess these will get posted. From Table 3 on — and maybe this has been the convention, I'm not sure — everything is entitled "Migratory Striped Bass"; so we have harvest of migratory striped bass when in fact although it says the bay, Maryland and Virginia are included, clearly, we have fish that are non-migratory.

You heard a lot about the male fish. In addition, a lot of our harvest is before any migration happens; so if there would be some confusion down the line, I'd recommend maybe not using the word "migratory" for each of these tables.

CHAIRMAN GROUT: Rob, I think this comes back to the convention that was used back when you and I were on the technical committee that it is a migratory stock of striped bass. Even though you're right, there are fish in the Chesapeake Bay that have yet to migrate and some that don't, that's fine. I think that's the reference here. Michelle.

DR. DUVAL: Just a quick question regarding the tagging report; we were one of the states that submitted a tagging report last year and we're getting ready to prepare one for this past year. My question is really more about the information contained in there. When we got the data request I guess a couple weeks ago, one of the pieces of information that was requested was number of participants.

I think in Addendum III it was your tags, what do they look like, different colors you're using for gear types or area, et cetera, the total number of tags that each states orders versus the total number of tags that were used. Is the total number of participants something that you want us to include in that tagging report? It doesn't really matter for us at this point, but just for future references the total number of participants is a piece of information that is requested.

MR. APPELMAN: For next year we're probably going to send out a very specific report of what we want to see in that report or specific guidelines as to what to include in that report. You can expect to see that for next year.

DR. DUVAL: So for this year, because North Carolina's fishery has a December 1 start date, we would be submitting our report no later than October 1st. Our intent was to update the numbers that we submitted last year with a table; so we should go ahead and just do what we did for last year for this year and then expect a format to be sent out for the following fishing year?

MR. APPELMAN: The short answer is, yes, we'll probably send out a brief memo immediately following this meeting.

DR. DUVAL: This is just a question probably for some of the bay jurisdictions. It was in 2013 that you all implemented that 14 percent reduction in the baywide quota; is that correct? Did that stay the same for the 2014 fishing year or did that go up or did it go down? It went back up?

MR. LUISI: I can answer the question, Mr. Chairman. The years kind of jumble themselves together after a while, but we did reduce, based on the exploitable stock biomass in the bay in 2013, by 14 percent. We then turned the following year, based on the exploitable stock biomass at the time as a result of new recruits coming into part of the fishery, we did go back to – again, we went up 14 percent the following year.

The reductions that we took last year were based in part I believe on 2012 quota or harvest; so it didn't factor into the decision of the reductions that we took last year in the bay because it went back prior to the time period where we had the 14 percent, it came back up 14 percent again. I hope that answers your question.

DR. DUVAL: It was just out of curiosity because I noticed that some of the harvest numbers went up for 2014 both on the commercial and

recreational side in the bay jurisdictions; and I just didn't see the number in there for what the actual baywide quota was.

CHAIRMAN GROUT: Further questions? Go ahead, Mike.

MR. LUISI: Just a simple observation. This might be a little picky, but it is a sensitive issue for us in Maryland. Between Page 10 and 11 there is a discussion referring to the Chesapeake Bay trophy fishery. It gives the history of the fishery, some of the changes that have been made, and it establishes the limits for what Maryland has had in place in the Potomac River since 2008.

It then goes into explaining after that how Virginia's fishery has a higher size limit and a shorter season, which kind of implies that they're functioning under that fishery as more conservative. I'm not sure that's necessarily the case. I think we have measures in place that would correspond with one another as far as their conservation effort. Again, it is a little picky and just in future reports, it might be best not to – you know, just state the facts and not have an implication implying that there is a difference between states. Thanks.

CHAIRMAN GROUT: Any further questions or comments? I need a motion to approve the FMP Review. Dennis Abbott.

MR. DENNIS ABBOTT: I make a motion to accept the FMP Review for striped bass.

CHAIRMAN GROUT: Is there a second; okay, Emerson. Any discussion? Any objections? It stands approved. We're now down to other business; is there any other business before this board today? Bill Goldsborough.

MR. GOLDSBOROUGH: Mr. Chairman, I was just wondering – I see Captain Ed O'Brien is here for the advisory panel – was there going to be a report from the panel?

ADJOURNMENT

CHAIRMAN GROUT: He was just here as are most APs in case the board had specific questions of the AP about certain things. Anything further? I'll take a motion to adjourn. Thank you very much.

(Whereupon, the meeting was adjourned at 2:30 o'clock p.m., August 5, 2015.)
