

**PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
AMERICAN EEL MANAGEMENT BOARD**

**Crowne Plaza Hotel Old Town  
Alexandria, Virginia  
August 6, 2013**

Approved October 2013

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## INDEX OF MOTIONS

1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of May, 2013** by Consent (Page 1).
3. **Move to initiate Addendum IV to develop the four new working group recommendations; the potential new glass eel fisheries, the glass eel quota management options, the yellow eel quota management options and the yellow eel limited entry** (Page 31). Motion by Terry Stockwell; second by Pat Augustine. Motion carried (Page 37).  
  
**Move to substitute to remove Section 4.1.1, the glass eel fishery, from Addendum III and task staff to prepare a new addendum including but not limited to the following: Issue one, coast-wide glass eel quota; Issue two, outline adequate monitoring requirement; Issue three; outline adequate enforcement measures and penalties; Issue four, transferability; Issue five, timely reporting** (Page 32). Motion by Ritchie White; second by Louis Daniel. Motion carried as the main motion (Page 37).
4. **Move to amend the substitute motion to strike “of 5,300 pounds allocated equally between all states”** (Page 34). Motion by Steve Train; second by Dave Simpson. Motion carried (Page 37).
5. **Move to adopt for the yellow eel fisheries under Section 4.1.2 for Option 2 increasing minimum size to 9 inches, for Option 3b one-half inch by one-half inch minimum mesh size, and for Option 5 trip level reporting requirements** (Page 38). Motion by Doug Grout; second by Bill McElroy. Motion carried.
6. **Move to amend to remove Option 5 for trip level reporting requirements** (Page 39). Motion by Adam Nowalsky; second by James Gilmore. Motion was defeated (Page 40).
7. **Move to amend to add a 5 percent tolerance to the minimum size limit by number** (Page 44). Motion by Pat Augustine; second by Steve Train. Motion was defeated (Page 46).
8. **Motion to have a three- year phase-in period for the minimum mesh size in which a four-inch square one-half inch by one-half inch mesh escape panel could be utilized** (Page 46). Motion by Adam Nowalsky; second by Jim Gilmore. Motion carried (Page 47).
9. **Motion to adopt under Section 4.2, recreational fisheries, Options 2, the 25 fish per day angler creel limit; and Option 3, the exemption for party/charterboats** (Page 47). Motion by Doug Grout; second by Bill Adler
10. **Motion to amend to strike the Option 3, an exemption for party and charterboats** (Page 48). Motion by Dave Simpson; second by Steve Train. Motion was defeated (Page 48).
11. **Motion to amend that the size limit for the recreational fishery matches the size limit for the commercial fishery** (Page 49). Motion by Mitchell Feigenbaum; second by Pat Augustine.
12. **Main motion now reads move to adopt under Section 4.2 recreational fisheries Option 2, 25 fish per day creel limit; and Option 3, an exemption for party and charterboats; and the size limit for the recreational fishery matches the size limit for the commercial fishery.** Motion carried (Page 49).

13. **Motion for Section 4.1.3 for silver eels fisheries adopt Option 2, seasonal closure restrictions** (Page 49). Motion by Doug Grout; second by Bill McElroy.
14. **Motion to amend for Section 4.1.3 for silver eel fisheries, to adopt Option 2, season closure; but exempt the Delaware River Weir Fishery in New York; and to allow for spearfishing gear** (Page 50). Motion by Jim Gilmore; second by Paul Diodati. Motion was defeated (Page 52).
15. **Move to substitute for further consideration of silver eel fisheries into Addendum IV** (Page 53). Motion by Terry Stockwell; second by Jim Gilmore. Motion was defeated (Page 54).
16. **Motion to amend to include an exemption for spear fishing** (Page 54). Motion by Mitchell Feigenbaum; second by Paul Diodati. Motion carried (Page 55).
17. **Main motion now reads move for Section 4.1.3 for silver eel fisheries, adopt Option 2, seasonal closure, with the exemption of spearfishing.** Motion carried (Page 55).
18. **Motion to adopt the working group recommendation on Option 5, pigmented eel tolerance** (Page 55). Motion by Mitchell Feigenbaum; second by Terry Stockwell. Motion carried (Page 56).
19. **Motion for approval of Addendum III as modified today with an implementation date of January 1, 2014** (Page 56). Motion by Doug Grout; second by Bill McElroy.
20. **Motion to amend to include a one-year exemption to the implementation date for the 2014 New York Delaware Silver Eel Weir Fishery** (Page 57). Motion by Adam Nowalsky; second by Malcolm Rhodes. Motion carried (Page 58).
21. **Main motion now reads motion to approve Addendum III as modified today with the implementation date of January 1, 2014, with a one-year exemption for the New York Delaware River fishery.** Motion carried (Page 58).
22. **Move to add to Addendum IV consideration of the New York Delaware River Silver Eel Weir Fishery** (Page 58). Motion by Jim Gilmore; second by Adam Nowalsky. Motion carried (Page 58).
23. **Adjournment** by Consent (Page 60).

## ATTENDANCE

### Board Members

Terry Stockwell, ME, proxy for P. Keliher (AA)	Loren Lustig, PA (GA)
Steve Train, ME, (GA)	Mitchell Feigenbaum, PA, proxy for Rep. Vereb (LA)
Rep. Walter Kumiega, ME (LA)	Roy Miller, DE (GA)
Doug Grout, NH (AA)	David Saveikis, DE (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	John Clark, DE, Administrative proxy
G. Ritchie White, NH (GA)	Bernie Pankowski, DE, proxy for Sen. Venables (LA)
Paul Diodati, MA (AA)	Russell Dize, MD, proxy for Sen. R. Colburn (LA)
William Adler, MA (GA)	Thomas O'Connell, MD (AA)
Rep. Sarah Peake, MA (LA)	Bill Goldsborough, MD (GA)
Mark Gibson, RI, proxy for R. Ballou (AA)	Rob O'Reilly, VA, proxy for J. Travelstead (AA)
Rick Bellavance, RI, proxy for Sen. Sosnowski (LA)	Catherine Davenport, VA (GA)
Bill McElroy, RI (GA)	Louis Daniel, NC (AA)
Rep. Craig Miner, CT (LA)	Bill Cole, NC (GA)
David Simpson, CT (AA)	Sen. Ronnie Cromer, SC (LA)
Lance Stewart, CT (GA)	Ross Self, SC, proxy for R. Boyles, Jr. (AA)
James Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Pat Augustine, NY (GA)	Spud Woodward, GA (AA)
Anthony Rios, NY, proxy for Sen. Boyle (LA)	Patrick Geer, Administrative proxy
Russ Allen, NJ, proxy for D. Chanda (AA)	Jim Estes, FL, proxy for J. McCawley (AA)
Tom Fote, NJ (GA)	Derek Orner, NMFS
Adam Nowalsky, NJ, proxy for Asm. Albano (LA)	Bill Archambault, USFWS
Leroy Young, PA, proxy for J. Arway (AA)	Martin Gary, PRFC

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

### Ex-Officio Members

Joe Fessenden, Law Enforcement Committee Rep.	Marty Bouw, Advisory Panel Chair
Brad Chase, Technical Committee Chair	

### Staff

Robert Beal	Kate Taylor
Toni Kerns	

### Guests

Wilson Laney, USFWS	Jeffrey Pierce, Maine Elver Fishermen Assn.
Charles Lynch, NOAA	Darryl Young, MEFA
Michael Eastman, NH F&G - LE	Amanda Poland, MEFA
Taylor Daley, DNREC	Greg Blasler, MEFA
Drew Walterhouse, Kleinschmidt Assoc.	Raymond Kane, CHOIR
Fritz Rohde, NMFS	Benson Chiles, Chiles Consulting
James Trossback, PRFC	Bill Legg, ASMFC Am. Eel AP, Grayson, MD
Kevin Miller, Portland Press Herald	Aaron Kornbluth, PEW Trusts

The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel Old Town, Alexandria, Virginia, August 7, 2013, and was called to order at 8:00 a.m. by Chairman Terry Stockwell.

### **CALL TO ORDER**

CHAIRMAN TERRY STOCKWELL: Good morning, everyone. I'm Terry Stockwell, the Chair of the American Eel Board; and we've got a long morning ahead of us. I just want to lay out the game plan. As you all know, the Executive Director chaired most of the last meeting, convened the working group, and the working group met multiple times during June and July to develop recommendations for this board meeting.

Kate has got several presentations. We're going to go through all of those and take any of your questions, take a coffee break, and then I am going to turn the meeting over to Bob as we consider the working group draft management options and recommendations.

### **APPROVAL OF AGENDA**

CHAIRMAN STOCKWELL: With that being said, are there any additions to today's agenda? Seeing none; I will consider the agenda approved.

### **APPROVAL OF PROCEEDINGS**

Has everybody had a chance to review the proceedings of the May board meeting?

MR. DENNIS ABBOTT: On the index of motions, it says that the motion that you made was seconded by Mr. Clark. It said the motion carried; move that the following measures be approved for the commercial glass eel fishery; participating states must conduct a complete life cycle survey within three years, et cetera and et cetera.

I don't recall a vote, number one, and I think we had agreement on Page 37. Mr. Diodati suggested that he withdraw our motion and you withdraw your motion. I don't see that we took any specific action other than the Executive Director saying everybody seemed to nod in

agreement. I think that is an error on Number 5; the motion that you made.

CHAIRMAN STOCKWELL: Yes, thank you, Dennis, I agree with that. I didn't formally withdraw the motion, because the board's discussion took a life of its own, but you are absolutely correct.

MR. ABBOT: But the motion did not carry.

CHAIRMAN STOCKWELL: That is correct. The amended minutes will reflect that. Are there any other comments on the proceedings? Seeing none; consider them approved.

### **PUBLIC COMMENT**

I have one person who has signed up to speak to the board on issues not on the agenda today. Is there anybody else from the public who would like to speak? If not, Rick, if you could come forward; please identify yourself to the board.

MR. RICK ALLEN: Good morning. My name is Rick Allen from the American Eel Farm; and I'm here to speak about aquaculture. I would like to refer to comments made in the April 2000 Fishery Management Report Number 36 of the Atlantic States Marine Fishery Commission. It states on Page 19, "New York, Rhode Island, Delaware, Maryland, PRFC, and North Carolina have only recently; '92 through '95, imposed a minimum limit of 15 centimeters so as to protect elvers and glass eels for local aquaculture development.'

This being the case, it clearly seems that the intent of the state of North Carolina and ASMFC at the time was to allow and provide for the development of local aquaculture facilities to grow out the elvers and glass eels. At this time, American Eel Farm is an existing 2 million dollar facility that is the only permitted facility in the U.S. specifically for the grow out and development of the American eel.

We need a harvester's permit to do so. In addition to those comments, there was this intent by the board to allow for aquaculture or to support aquaculture was confirmed in May by Mr. Stewart. His comments were; "I just thought a recount history a little bit, I was the

first Chairman of the Eel Board when the Eel Board was first created.

“Before that I was in academia, and had designed a clearinghouse for glass eel fisheries. That had come to me underground, so to speak, at the time that was supported by a lot of Asian money. We have the idea and the concept to support the Taiwanese and Japanese to have a grow-out facility in the state of Connecticut, which would then export one kilogram. Anyway, just a point of business and comment for all the states that could still be a possibility. “Not just the glass eel fish that you sell for a dollar in a barrel to the Asian market, but to develop some sort of grow-out aquaculture industry.”

We have an existing farm with the intentions to use our farm as a means to support sustainability through aquaculture and also by returning a percentage of our grow-out back to the wild. Aquaculture also provides a sound, ethical choice for food and nutrition, security and human well being; and now is the ideal time while the fishery is stable.

I would just like to make a quote here from the Food and Agricultural Organization of the United Nations. “Aquaculture is currently playing and will continue to play a big part in boosting global fish production and in meeting rising demand for fishery products. A recent session of the FAO Committee on Fisheries stressed an increasingly important and complementary role of aquaculture.” Thank you for your time and I would be here for any questions if you need me.

**CHAIRMAN STOCKWELL:** Before we move on to Kate, I will turn it over to Bob for a minute.

**EXECUTIVE DIRECTOR ROBERT E. BEAL:** Since this is the first coast-wide board that met during the meeting, I want to introduce two new folks that are sitting around the table. Anthony Rios from New York is serving as a proxy for Senator Philip Boyle from New York. Marty Gary is the new Executive Secretary for the Potomac River Fisheries Commission. A few new faces at the table and I wanted to make sure

everyone knew where they were from and then take time to introduce yourself during the breaks.

**CHAIRMAN STOCKWELL:** Thanks, Bob, and welcome. Kate, it’s all over to you now.

### **DRAFT ADDENDUM III TO THE AMERICAN EEL FMP**

**MS. KATE TAYLOR:** I will be reviewing the management options that were under consideration in Draft Addendum III that the working group began with, and then I’ll also be going through the working group recommendations that were developed between now and the May meeting.

### **REVIEW OF MANAGEMENT OPTIONS**

As you can recall, our current fisheries management plan was adopted in 1999 and set recreational and commercial management measures for all the states for their glass, yellow and silver eel fisheries. Last year the board was presented the 2012 benchmark stock assessment, which was accepted for management use.

American eel; the stock status was declared depleted due to habitat loss, passage mortality, disease and shifting oceanographic conditions as well as fishing mortality. Draft Addendum III was initiated in response to the stock assessment. This addendum contained habitat recommendations, monitoring requirements and also proposed changes to the commercial and recreational fisheries.

The goal of the addendum was to reduce mortality on all life stages. It was proposing coast-wide regulations and the options could be implemented in combination. As I mentioned, there were habitat recommendations contained in the document to help improve our understanding of how American eels are using the habitat, as well as to increase or improve upstream and downstream passage and habitat restoration.

The addendum also proposed a number of fisheries-independent and dependent surveys to aid in data collection for use in management as well as future stock assessments. Under the

draft commercial management options, there were proposed measures for glass, yellow and silver eel fisheries.

Under the commercial glass eel management measures, for Maine and South Carolina only options included Option 1, the status quo; Option 2, a closure of the glass eel fishery; either immediate or a delayed closure. Option 3 was a quota based on the historical average of landings from the 1998 through 2012 time period. Then there were also options for harvest reductions from this time period of 25 and 50 percent.

The draft addendum contains tables and this graph for both Maine and South Carolina, showing what those quota allocations would look like. Additionally, under proposed glass eel measures was an option for increasing dealer and harvester restrictions, as well as an option for a pigmented eel tolerance where only a small tolerance of pigmented eels would be allowed to be harvested.

This was in response to concerns about the development of the pigmented eel fishery, given the price for glass eels. Under the yellow eel management measures, the proposed options included Option 1, the status quo; Option 2, an increase in the minimum size of yellow eels harvested with a range of 8 to 12 given.

Tables in the document show what the impacts would be for those states we had data for in their fisheries, as well as the potential increase in eggs per recruit that the increase in minimum size would also be associated with. The additional options included gear restrictions; specifically a three-quarters by half-inch minimum mesh size or escape panel or a one by half inch minimum mesh size or escape panel. There was also an option for a coast-wide yellow eel quota. Again, this was based on a few different options for allocation based on landings from a few different years, as well as restrictions from those base years.

The first option was to use the landings from 1998 to 2011. The second option was 1999 to 2011. The third option was 2002 to 2011. Additionally, there was, similar to the glass eel

measures, an option for increasing reporting requirements. There was also an option for a two- week fall closure for the yellow eel fishery, which would apply only to the pot and trap fishery. That would take place between September 1st and October 31st, and it would be for two consecutive weeks; although states could specify when the closure would occur.

There is a table in the document that contains the impacts that this closure could potentially have, although the table is by month, and so you would have to half those values. Under the silver eel management measures, the options include Option 1, the status quo. Option 2 would be gear restrictions; specifically no take of eels from the fall from any gear type other than baited pots or traps. The recommended timeframe for this by the PDT was September 1st to December 31st.

There was a table in the document which shows the out-migration of American eels from rivers along the coast where that information is known, as well as the associated harvest by month to show the impact of this measure. The draft addendum also contained options for the recreational fishery. Option 1 was the status quo, which would be the current bag limit of 50 fish per day.

Option 2 was to reduce the recreational bag limit to 25 fish per day per angler. Option 3 was an allowance for the party and charterboat exemption; that if Option 2 was chosen, the board could consider this option and would maintain a current 50 fish per day limit that party and charterboats now have, and that is per crew member. Thank you, Mr. Chairman.

CHAIRMAN STOCKWELL: Are there any questions for Kate? Okay, moving on to the working group recommendations.

## **REVIEW OF WORKING GROUP RECOMMENDATIONS**

MS. TAYLOR: As I just mentioned, Draft Addendum III was initiated back in August in response to the findings of the American eel stock assessment, which found the status of the stock to be depleted. The board initially

reviewed a draft of this addendum in October, provided additional guidance to the PDT and then approved this document for public comment in February.

This draft addendum was out for public comment in April and May. The board reviewed the public comment at the May meeting, at which time the board appointed a working group of commissioners, AP members and technical committee members to develop potential recommendations on moving forward with the finalization of Addendum III.

This working group met multiple times in June and July to review the management options that were contained in Draft Addendum III. The working group presents the following recommendations to the management board for their consideration. Under the monitoring and habitat sections, the working group supports these requirements and recommendations as contained in Draft Addendum III. The general recommendation was that the working group unanimously did not support Option 1, the status quo, for both the commercial and recreational fishery management measures.

Under the commercial glass eel management measures, the working group discussed the option for a closure. The working group does not support this option as the stock assessment found no stock-recruitment relationship; as well as the working group recognizes the economic importance of the fishery in those states that currently allow harvest.

Under the option for a quota for the glass eel fishery; the working group does not support any of the quota options that were initially included in the draft for public comment. The working group did discuss the option of a quota based on more recent landings, as well as the potential to transfer quota from the yellow eel fishery to the glass eel fishery.

The working group was interested in some modification of the options that were additionally contained in the public comment documents. I will discuss those later on in the presentation. Under the increased reporting requirement that was contained in the public

comment document, the working group did support increased commercial fishery monitoring, especially if a quota-based system was implemented to aid in management.

The working group also supported the monthly reporting requirements following the ACCSP standards. Under the requirement for a pigmented eel tolerance for the glass eel fishery, the working group supported this tolerance as well as any restrictions on harvest at this life stage. This would be applied to any state that has a glass eel fishery current or future.

The working group recommended that this could be accomplished through the use of a one-eighth inch non-stretchable mesh, which was also the recommendation of the advisory panel. The AP also recommended a 1 percent tolerance by count to this requirement. Under the commercial yellow eel measures, the working group looked at the options.

Again, did not support the status quo, Option 1; for the Option 2, increase in minimum size, the working group supported a minimum size of nine inches. They supported the recommendations of the LEC that it would be difficult to enforce a minimum size regulation without the use of complementary gear restrictions.

Therefore, the working group also recommends that if a minimum size is implemented, it be in conjunction with gear restrictions. For this gear restriction, Option 3 contained in the draft addendum, the working group discussed the proposed gear restrictions, including a new option for a half by half inch mesh requirement or escape panel.

Currently there are several states that have at least half by half inch mesh requirements in place with the exception of New Hampshire, Massachusetts, Rhode Island, Connecticut, Delaware and New Jersey. A half by half inch mesh requirement would cull eels approximately less than eight and three-quarters inches.

The working group recommended a half by half mesh requirement through the use of an escape panel for a specified time, for example, three

years or another timeframe specified by the board. After this time, the gear would have to be phased out. The working group recommended that states and jurisdictions that currently have more conservative measures than half by half inch mesh requirements be required to maintain these gear restrictions. This option was also supported by the advisory panel.

If a half by half inch mesh restriction is implemented with a nine inch minimum size, the board may have to consider a tolerance for undersized eels since there is the potential for – the analysis shows that it is eight and three-quarters inch eels correspond to half by half inch mesh. Additionally, there were comments that were brought up that sometimes eels are also kept by the harvesters or the dealers.

Another point would be the board needs to consider the point of enforcement if eels are retained and they lose their size and they fall below those requirements. For the coast-wide quota, Option 4, the working group was supportive of quota management for the fishery based on recent landings.

This aligns with the recommendations of the Stock Assessment Subcommittee as it was considered the most effective way to ensure a reduction in mortality. The working group however was not supportive of the base years that were presented at the public comment document or the method for allocating quota to the states and was interested in some modifications to the options, which I will discuss later on in the presentation.

The working group was supportive of the increased reporting requirements under Option 5, consistent with the glass eel fishery, and especially if a quota-based management program was implemented. Additionally, the working group supported the monthly reporting following ACCSP standards. The working group was not supportive of the two-week fall closure.

Under the commercial silver eel management measures, the working group unanimously supported Option 2 with some modifications. The working group noted the cultural value and economic support to the community provided by

the silver eel fishery along the Delaware River and its tributaries. However, the goal of the addendum is to reduce mortality on all life stages. An increasing survival of silver eels provides the greatest chance for increasing spawning success.

The working group recommends prohibiting the harvest of American eels from gears other than pots, traps and spears from September 1st to December 31st, with the exception of New York commercially licensed weir fishermen in the Delaware River and its tributaries from September 1st through December 31st.

The working group recommends that New York must reduce active effort, so not through latent effort removal, by an amount specified by the management board. The effort reduction plan must be submitted to the technical committee for review and approved by the board no later than a date specified by the board. The goal here would be to have the fishery phased out within ten years or some other timeframe specified by the board.

Additionally, the board may want to consider silver eel monitoring requirements similar to the requirements for the potential allowance for the glass eel fisheries, as I will discuss later. Under the recreational fisheries management measure, the working group unanimously supported Option 2, the 25 fish per day bag limit; as well as Option 3, the exemption for the party and charterboats.

The working group was supportive of also having the same minimum size for both the commercial and the recreational fisheries. The working group recommends the finalization of Addendum III as recommended to allow for the potential implementation of management measures prior to the start of the 2014 fishing season. The working group recommends the immediate initiation of Draft Addendum IV, which would include measures from Draft Addendum III that have been further refined based on the public and board input, as well as the new measures developed by the working group and the stock assessment subcommittee.

Those new measures which were contained in the memo; I will go through those right now. The initial proposed goal for Draft Addendum IV would be to reduce overall mortality on American eels. This document could be made available for the board's review in October with final approval at the February 2014 meeting.

Draft Addendum IV may include some of the following measures. Under a proposed commercial glass eel fishery, the working group discussed the possibility of allowing the development of glass eel fisheries in states where harvest is currently prohibited. The working group recognizes that the Stock Assessment Subcommittee emphatically does not support the development of additional glass eel fisheries due to the uncertainty in the stock-recruitment relationship and the natural mortality estimates, as well as the concern that poaching could have on the health of the stock.

However, the working group discussed that if two states are allowed to continue to operate a glass eel fishery, the remainder of the states should be given this same opportunity provided certain restrictions and requirements are met. Inherent in this is that there will be a reduction in the mortality on eels even if there is an increase in the number of states participating in the glass eel fishery.

Additionally, the associated survey requirements may provide much needed data on the stock for use in future assessments. Under the glass eel fisheries requirements, four states that could open up a glass eel fishery would be required to do the following measures. There would be a reduction in mortality in the yellow eel fishery potentially through the transfer of yellow eel landings into a glass eel quota. This would require that the states have implemented a yellow eel quota.

For states that have limited landings due to declining efforts or interest in the fishery, they could be granted a limited glass eel fishery not to exceed a specified amount as determined by the board. There could also be a requirement to reduce mortality or increase survival on other life stages for states wishing to opt into that.

Additionally, for states looking to open up a glass eel survey, the working group recommends the completion of a full life cycle survey in at least one watershed for at least three years. This would be implemented prior to or during the start of the first open glass eel fishing season. Allocation could be revisited after three years or another timeframe specified which aligns with the collection of the data in the life cycle survey.

The working group recommends for those states or jurisdictions looking to open up a fishery that they need to have adequate penalties to discourage poaching, adequate enforcement to monitor poaching, timely commercial monitoring to ensure that the quota is not exceeded, the ability to close the fishery when landings reach a specified threshold as determined by the board and as well as implementation of the pigmented eel tolerance. The implementation program would be subject to technical committee, LEC and/or AP review. The quota for states that currently have a glass eel fishery; the working group recommends the options in Draft Addendum IV to include quota allocations based on the average landings from the following periods: 1998 to 2012, 1998 to 2010, 2010 to 2012, or 2007 to 2012.

The working group also considered inclusion of a percent reduction from one of these timeframes or another amount specified by the board. Additionally, for those dates that would continue their glass eel fishery, the working group recommends the inclusion in Draft Addendum IV of the requirement for a completion of a full life cycle survey; looking at a timeframe for revisiting of allocation. Additionally, those states need to ensure that adequate penalties and enforcements are in place to monitor poaching; that timely commercial monitoring is allowed so that quota would not be exceeded.

The states would also have the ability to close the fishery when landings reach a specific threshold and also would include the pigmented eel tolerance with the implementation program subject to committee review. That was the proposed measures for states that currently have a glass eel fishery.

Under the Proposed Draft Addendum IV commercial yellow eel management measures; the working group was supportive of quota management for the yellow eel fishery, but recommended the use of a new approach in determining allocation and in setting the quota to be contained in Draft Addendum IV.

Specifically, the working group recommended that the proposed measures included in the documents; that the allocation be based on the average of the three highest landing values from 2002 to 2012, and that the total coast-wide quota – so that would be the three highest landing values for each states and that is then summed and then that percentage is then divided up amongst the states; and that the total coast-wide quota be based on a base year landings from 1998 to 2012, 1998 to 2010, 2010 to 2012, or 2007 to 2012.

Additionally, options could also include a percent reduction from one of the above amounts or another amount specified by the board. The table contained in the memo shows the percent allocation to each state based on their three highest landings from the years 2002 to 2012. Then it shows the four different options that were available to show based on landings from the following year schemes.

The working group recommends that if this option is included in the document, that its quota is revisited after three years or another timeframe as specified by the board. The working group also recommends a 2,000 pound minimum for those states that have small fisheries to reduce the administrative burden of monitoring. This quota however could not be used for a glass eel conversion.

If a state exceeded its allocation and the total coast-wide quota was also exceeded, that state could be required to implement management changes in the following year to reduce harvest. If the total coast-wide quota was exceeded, then those states or jurisdictions that exceeded their allocation would be required to pay back their quota in the following year in one of the following ways. Either the state or jurisdiction would be deducted equal to the amount of the overage that occurred in the states or jurisdiction

for the following year, as occurs in many of the commission- managed species.

Additionally, there would be an option that the states or jurisdictions that exceeded the quota would have their quota deducted in the following year in proportion to the quota overage, which is similar to black sea bass. There could also be another proposed method as specified by the board to be contained in the Draft Addendum IV document.

There is a table in the memo that just gives an example on how the overages could be potentially deducted in the subsequent years. If during the fishing year a state or jurisdiction exceeded its allocations, then that state would be required to implement measures to close its yellow eel fisheries for the remainder of the year when the landings reach a specified threshold as determined by the board.

Additionally, the working group recommends for inclusion in Draft Addendum IV that if a state chose to allow a glass eel harvest, then the state would have its yellow eel quota reduced by the required amount, which is similar to the recommendation I made under the proposed glass eel management options.

The implementation of the quota system within a state's waters would be determined by the state, so the state would have the flexibility for implementing the system. The working group did not have any recommendations at this time to be contained in the draft addendum on how that implementation would occur. Again, the quota allocation could be revisited after a timeframe specified by the board.

The working group also did discuss the implementation of a limited entry program for the yellow eel fishery, but thought that it would not be necessary if quota management was implemented, but they did discuss this as an option to be contained in the document. However, there would be a few states that this would be an administrative burden to them. Under this option, states would be required to reduce latency in limited entry into the fishery. That concludes my presentation on the working

group recommendations. Thank you, Mr. Chairman.

CHAIRMAN STOCKWELL: Thank you, Kate, for a very succinct report. Questions? Roy.

MR. ROY MILLER: Thank you, Mr. Chair, and thank, you, Kate, for the excellent report. I have a question concerning specifically the portion of the recommendations regarding the potential for opening glass eel fisheries provided there is a concurrent reduction in the yellow eel fishery in the state.

Kate, for a data- poor species, which this is acknowledged to be, I am wondering in my mind how that might be calculated. Do you have any preliminary thoughts as to what types of data would be needed to conduct those particular calculations of substituting glass eel harvest for yellow eel harvest?

MS. TAYLOR: The Stock Assessment Subcommittee did weigh in on this, and Brad will get into it in a minute with his presentation. The technical committee did weigh in on the life cycle survey; and the Stock Assessment Committee gave recommendations for the specific information that they would want included to help aid in future stock assessments, as well as the potential to calculate these estimates with greater certainty in the future. It is age of entry into the fishery, mortality of glass and yellow eels, age structure and average length and weight of eels in the fishery, as well as any other additional information states wanted to add in.

MR. JAMES GILMORE.: That was a great presentation, Kate, because when I was reading this stuff last night, it was getting foggy, but that cleared up a lot of questions I had. Just two starters first, the data we have to essentially decide quota distribution, I am just wondering how good the data is that we are running into another menhaden issues where we suddenly are going to divide this thing up based upon inadequate landings.

How confident are we; and do we have the same problem that we have with we just have unreported landings, so we're going to divide

that up. Secondly, I'll throw this question out, because it is more of a rhetorical question. Can we actually define what adequate enforcement and penalties are?

We could talk about that for the rest of our lives; and unless there is some outside body like – I run the shellfish program; so we have the feds come in and they tell us what adequate enforcement is. But it is one of those ones that and you don't have to answer this, but I am not sure how we would define that; But if you could answer the first one, thanks.

MS. TAYLOR: I can definitely answer the first one. The second one would be up to the board. For the landings, the quota allocations; the landings that were used were from the stock assessments, the 2002 to 2012 base year. As you know, the stock assessment contained data really only through 2010. We did have some 2011 landings that we did look at. To supplement for the additional 2011 landings and the 2012 landings, we used data either provided by the state or by ACCSP. We're fairly confident in those numbers.

MR. ADAM NOWALSKY: One of the sections of the addendum was habitat recommendations, and I see that the working group did make the general comment that they support the monitoring requirements and habitat recommendations; but was there any discussion about the viability of actually being able to achieve any of these habitat recommendations in a realistic timeframe?

Specifically, we go back to the benchmark stock assessment where it talks about current levels of fishing effort may be too high given the additional stressors. We could just as easily substitute that current levels of habitat loss may be too high.

We've got all these other factors affecting the mortality; we're only here talking about fishing mortality specifically. We have an addendum that contemplates ways to deal with a lot of this habitat loss and habitat recommendations, but what can we actually do? What did the working group talk about the viability of achieving these, if at all?

MS. TAYLOR: The working group reviewed the habitat recommendations. These were developed with the PDT and Technical committee input; and it based on the recommendations from the stock assessment. These recommendations provide a guide, hopefully, that the technical committee can work amongst the committee within their states and with the board to meet all of the items that are contained under there. But since they were just recommendations, there wasn't further deliberation past that.

MR. NOWALSKY: What would be the next steps to take them beyond recommendations then and actually to implement some of these?

MS. TAYLOR: That would certainly – with the recommendations contained in the document, there are recommendations to the states to implement these as they can with the assistance of the Technical committee or other ASMFC committees as available.

MR. ABBOTT: My first question was going to be the same as Mr. Miller had about how we determine the value of yellow eels versus a number of glass eels; but beyond that, let me say that when I left the last meeting, it was my understanding and I thought that the working group was going to focus on the glass eel issue.

That is where we were in the debate. We were talking about the problems that we were having coming up with either a moratorium on one side and an open fishery on the other. We talked back and forth. I do appreciate the work that the working group did. It obviously was a lot of work to provide us with the things that they did; all the recommendations.

But I don't see enough information there concerning glass eels, which I thought was going to be the focus, and the task was to be able to provide us with additional options about glass eels. I think we know that we are all in this room essentially today to be dealing with the glass eel situation. I am not sure that we're dealing with that.

What we did is we created a working group who suddenly conducted the equivalent of public hearings and whatever and came up with their own determination, which part of that should be the work of the complete board and part of it should be the public offering input. I didn't expect them to say that they wanted to close this or that or whatever the options would be.

I think that is this board's decision, and not a group comprised of seven commissioners and people from the Services and the technical committee and the AP chairs. Again, I appreciate the work that they did, but I don't think that we achieve – unless I'm getting it wrong, that we achieved what we think that we asked them to do back at the May meeting. Am I wrong in that assessment, Mr. Chair?

MS. TAYLOR: The options contained in the memo are just recommendations for the board's consideration. The working group did meet many times in June and July, and they had specific calls just for the commercial fishery, just for the glass eel fishery; and while it might have been the thought to only focus on the glass eel fishery, given that it is the same species and when they were discussing the specifics for the glass eel measures, they realized that so much of this was woven into the yellow and the silver eel fisheries as well; so to kind of look at it as a more holistic approach, included measures for all life stages.

MR. ABBOTT: Just let me repeat that I have no intention of denigrating the work of the working group, but I just expected more meat when it came to the glass eel fishery than what I think I'm seeing. Maybe I'm the only one.

CHAIRMAN STOCKWELL: If you could resolve that issue for us today, we would appreciate it. Just to cycle back to Kate's explanatory, the working group is charged to develop recommendations for all life stages and to come back to today's board meeting so that we can move forward with a final action on Addendum III.

These are our recommendations for the board. Approval or disapproval, certainly there are some measures that if the board approves, they are going to have to go out for public hearing. I

think that is where we'll be going at the next stages of this morning's discussion. I've got quite a few hands coming up right now.

MR. ROB O'REILLY: Thank you, Mr. Chairman, and thank you for the report, Kate. To start off with just a couple things about the report; I think it is important, especially with the characterization of the data, that information is available at the base level. There is a Table 5 that is in the document from August 1 from the working group.

First, I want to fill in a couple blanks there I see for Virginia, because it is important to know about the effort in this fishery. Virginia has a combined fish pot/eel pot license. Virginia doesn't define a fish pot; and consequently if you go to buy a fish pot/eel pot license, you have to know from the data that comes in what is really being active.

Out of the 427 permits listed, 55 are active as of 2012 eel pot fishermen; those are landings from eel pot fishermen. There are three categories there which range from less than 100 to 300 plus. Twenty percent roughly, 11 of the 55 are in the 300 plus pots. I think it is good to file that information.

Latency would be a difficult thing to do. It can be done, but at this stage we haven't segregated the fish pot landings from the eel pot landings. But I think it is going to be important as we go forward to have more information from all the states. One of those statistics is catch-per-unit effort, or catch per pot; the largest gear, perhaps.

I don't know how much of that is available. I think it is information like that that would really help to have some catch-per-unit effort information. I note from the Virginia data that except for 1997, when there was a spike up; that generally from the time mandatory reporting was started in Virginia in 1993 until the present, really, the trend is pretty much the same.

There is just a little bit of variance around that trend, relatively flat. Of course, the landings, at least since maybe the mid-nineties in Virginia also have shown a drop from about 400,000 heading in to the early nineties to about 100,000

on average the last six years. I think if we have some nominal statistics like catch-per-unit effort, it would be very good.

I did want to comment also on the glass eel. It is going to be commented on many times today, but I did think from the last meeting and from the meetings before, the question I've always had is what is the relationship or how is it being done to probe the relationship from the glass eel to the yellow eel?

In fact, there are monitoring programs which have been in effect for quite a while in several states for the glass eel. I know in Virginia the questions keep rising up as to, well, what is this really telling us? Each time I've asked the question, it has become a little bit closer to the Stock Assessment Subcommittee indicating that there is promise there. It is just not quite there yet.

On top of that and the fact that it has been stated the stock recruitment relationship; if it is there, it is not very strong, I suppose, but now you move to a slightly advanced life stage from the recruits to the glass eel. When we left off last meeting, one of the questions was would this type of mortality in the glass eel fishery be subsumed by natural mortality?

In other words, if there was not a glass eel fishery, what would the net effect be in terms of overall mortality? Would it be part of the natural mortality as was proposed quite a few years ago by Brian Jessop in Canada? I think that it needs to be discussed about the tradeoffs, trying to achieve conservation equivalency with glass eels and the yellow eels.

That should be a pretty good discussion given the backdrop of a lack of stock-recruitment or a strong in a way a lack of the glass eel to yellow eel relationship shown yet, and also this idea that perhaps are we swapping something in terms of a fishery that has existed right now in two states; would it be simply a natural mortality situation? I think that is a tough question, but I know that was a question from last time.

CHAIRMAN STOCKWELL: Yes, thanks Rob, good questions, some of which the

subcommittee struggled with as well. Following all the questions on Kate's presentation, Brad is going to be making a report from the Stock Assessment Subcommittee, which is going to cover some of the issues that you have just raised. Mitchell.

MR. MITCHELL FEIGENBAUM: I just wanted to address a few of the points that have been raised. I do have a question for Kate; but starting with my last point, since it addresses what Rob was just talking about, I just would point out that the working group has continued to present the condition or not the condition but has adopted the line of thinking that says if there were to be any expansion of glass eel fisheries based on some conservation equivalent, some conversion of the yellow eels; that there would be these survey requirements.

Sometimes in some of the conversations with fellow board members, I've gotten the sense that the survey requirement seems like it is being treated as if it would be a nuisance. But, really, Brian Jessop himself would tell you – and I hope Brad will support in his presentation that ultimately to really understand the stock and the relationship between recruitment and stocks, you have to survey in order to determine what are the natural mortalities at different life stages, and that there is going to be a lot of variability between different watersheds.

There is not going to be a one-size-fit-all formula. Brian himself has told me this; that he has studied the migration in glass eels to a particular watershed and then studied what is the yellow eel population down the road. That is how he determines what the natural mortality rates are at the different life stages. I just would emphasize that if there is any consideration of an expansion of the glass eel fishery, and if Maine is permitted and South Carolina to keep their glass eel fisheries, these survey requirements really should be taken seriously.

The second point I wanted to make was to Adam's questions about habitat. We heard yesterday and we've heard for years and years in these meetings the frustration that we all seem to feel over the fact that we don't have a whole lot of teeth in terms of dealing with habitat

restoration. I just want to throw out the possibility to my fellow commissioners that here we might actually have a creative opportunity to do something meaningful in the way of habitat.

That would be to somehow, as we go forward with the plans, to consider that quotas or the opportunity to convert from one kind of fishery to another could include incentives to states that by increasing habitat they could get some additional quota. It is just something to think about. It might not be the most ideal way to encourage habitat restoration, but it might also be the only way that this group can meaningfully put a little bit of teeth behind our constant recommendations that we promote habitat restoration.

Finally, Kate, I have a question for you. As you made clear in the presentation – I echo the sentiments of those who thought it was a good presentation – you mentioned that the working group did not support the idea of cutting back on latent effort because it would create administrative difficulties in some of the states.

Also, the working group said that if we went with a quota, then any adjustments to latent effort would be unnecessary, because the quota would be setting the cap so why bother with the limited entry. But I would also point out that many folks in the public felt and some of my fellow commissioners also have expressed to me that limited entry might be a more appropriate way of addressing the yellow eel concerns than quotas.

We also know that imposing quotas on the yellow eel fishery is also going to cause administrative concerns in the states. My question for you, Kate, is can you just explain a little bit more why it would be more difficult for states to address latent effort than it would be for them to develop statewide quotas – if in fact it would be more difficult. It seems to me the difficulty is inherent in either approach and it is just going to require hard work.

MS. TAYLOR: The removal of the latent effort doesn't really get to the goal of reducing mortality for life stages. Additionally, some of the states weighed in on the difficulties in

implementing limited entry system; specifically, for example, the state of North Carolina. Their legislative system requires that the limited entry must be a federally managed species either through the counsel or the ASMFC, and it must have an allocated quota. It would be very difficult for that state to implement a limited entry program if there wasn't a quota system already in place.

MR. GILMORE: I just wanted to echo a little bit of what Dennis Abbott had said. I sort of had the same impression when I left is that the focal point of this was the glass eel fishery. Actually, after we left the last meeting, I was kind of happy because I thought I got a bye after Marty's report about the weir fishery in the Delaware that was characterized it was so small and it was a historic fishery of little impact that essentially it could stay, whatever.

Now, I was kind of surprised when I saw the working group's recommendation that we're essentially going to phase this out. I guess the justification or at least the idea was that, well, the adults provide the greatest reproductive capacity. Yes, of course, but that is again based upon a significant harvest. If you have got an insignificant harvest, then trying to phase something out that really isn't a big player in this didn't seem to make any sense.

It just rubbed me a little bit that I'm sitting here going; well, sure, you can make the argument that the adults are the best contributors to reproduction in terms of the overall fishery, but recruitment overfishing is equally in damaging in the long run, which is what we're doing with the glass eel fishery.

That was just a bit of a surprise to me to see that now we've got something that I thought I was done with this. Now I have to consider maybe phasing a fishery out, doing a lot of work which I don't have the staff. I am still suffering from the menhaden issue that I have to get into, Mitch, in terms of the staff I have and monitoring that.

It is a lot of work done that I don't have the resources to do. Now I am faced with instead of walking out of the room with a bye, maybe

having to do a lot of monitoring and possibly developing a glass eel fishery, which just doesn't make any sense to me. This whole thing surprised the hell out of me. Thank you.

CHAIRMAN STOCKWELL: It sounds like you want to volunteer to be on the next working group.

DR. LANCE L. STEWART: Since I've been referred to in comments from the last meeting with my experience in glass eels, I thought I would refine that a little bit more. Back in the early nineties, we were very interested in S-K Proposals, fisheries development plans with the National Marine Fisheries Service.

Because of contacts that had come to me from the Asian area, because they knew I was experimentally looking at glass eels in eastern Connecticut, I submitted a proposal and they said it was an insignificant fishery. Anyway, we went from there. But I thought I would share some of the observations in about three years of doing field work quite vigorously during the times of recruitment of glass eels in eastern Connecticut.

Every stream, every small tributary has tremendous numbers of over-recruitment of glass eels. You can catch five gallons with a dip net in most streams. Now think of the survival rate. Of a fairly robust larvae or young eel going into a stream, there is tremendous over-recruitment. We've always looked at several populations, lobsters, bluefish and everything, as survival window mechanisms.

The number of young you have is limited by the carrying capacity of the stream or the habitat. This is even more significant in the eel fishery. I was strongly in favor of aquaculture. As the fellows from North Carolina are proposing today, I strongly support that because of the things that you can do.

By monitoring glass eel take or growing them to a yellow eel stage, not for bait but transplanting them, either up into inland waters, into coastal reserves, there is a tremendous management option not just to close a glass eel fishery but to utilize it. In every state up and down the seaboard into South America, into Europe has

glass eel recruitment that is one of the highest it has ever been in the last two years. I think if there is any time to utilize it without jeopardizing our stocks of adults, it would be now on a very tightly controlled and watched quota.

But I think you will find if you really intensively look at what we were supposed to be doing, glass eel recruitment survey, if you took one stream and caught all the glass eels you could in a night, you would get an idea of the tremendous abundance. Those are some of the things that I don't know whether all the board members have experienced. It is hard to go out in the middle of April when it is raining in a thunderstorm and the best glass eel runs are occurring and do the science.

But from my fairly expansive exposure to that, I would say that the glass eel is viable worldwide. Because it is a panmictic population, there is no salmonid philosophy here; they don't home to a stream. You have a South American male and a Newfoundland female. The only genetic input I can think of is the return back to the sargassum to spawn and the tendency to go to fresh water.

Those are probably the only mechanisms of a genetic driving force between panmictic species. That in itself is another survival trait; that you don't have a requirement of having a population that is very limited. Those are the few things. One observation that we made – I have one graduate student working with me – is that you would have some streams that you would predict to be very strong glass eel recruitment areas.

They weren't so, because of what we thought would be olfactory stimuli, which affects all other anadromous species, the herring and shad and everything else. Many of our streams have been compromised by sewage treatment plants put right on the coast, and you can imagine what the factory stimuli are to the very sensitive recruiting, either adults or young. Those are a few of the things I would like to throw out. But I don't think we've done enough to really assess glass eel quantities by the state surveys. It would be good to really emphasize maybe one or two states that want to hit it, how abundant those returns are.

MR. PAUL DIODATI: I just wanted to say a few things about the non-fishing mortality impacts that occur in this fishery and others, because we've talked about it a couple of times today and even yesterday in that business session it came up. Although the ASMFC isn't heavily involved in doing a lot of wetlands restoration, river work in terms of dam removals, improving passage for fish, the states are heavily entrenched in that.

We're doing an awful lot of work in our state parallel with the work that we do here with the commission. I wouldn't want anyone to think that we're not looking at the habitat impacts on these types of fisheries. Although when there are multiple impacts, and especially where the non-fishery impacts are critical, then I think it is even more important for us to look at controlling fishing mortality.

The document; and I appreciate all the work that went into it. I wasn't part of the working group, but I did listen in on a couple of sessions. There is a nuance that I see with the way the document was prepared compared to my listening in to those meetings. That is that when I read it, it sounds like there was strong consensus on all these findings and recommendations, but my recollection during the sessions I sat in on that some of the consensus really wasn't clear on a lot of these things.

Again, it is nuance in some of the things I read here. Like I think there was a passage that in addition to the recommendations and options the way it is couched; there was a passage in here about the stock-recruitment relationships. It basically made the reader think that it didn't exist, when the Stock Assessment Subcommittee don't know what it is. That is a big difference; not knowing it versus it doesn't exist is a major difference. I just wanted to bring those points out.

MR. DOUGLAS E. GROUT: I guess my question could go to both the working group and maybe the technical committee, but I'm going to shoot for the working group, because you're up at this point. I know this recommendation that if you were going to implement a glass eel fishery

or if you had one, that you implement a life cycle study, sounded like a good one.

My question is why would it only be limited to states implementing or having an elver fishery? Why wouldn't it be a requirement – if we think this is important information that we need to collect, why wouldn't it be a requirement of any states that have, say, a significant yellow or silver eel fishery, too, say, greater than 1 or 2 percent of the coast-wide landings. Was there any discussion of making this more of a broader requirement if it is a data? I guess my question – and maybe this is a loaded question for the technical committee – is would that be a good idea to have a broader life cycle study in each state that might have a significant fishery?

MS. TAYLOR: The working group did not discuss it beyond the requirement for the glass eel fishery. That is something that the board could consider. The technical committee has discussed this, and, of course, they would support any additional monitoring that would provide data to help for future assessments.

MR. BRADFORD C. CHASE: Let me just follow up to say, Doug, that the technical committee has discussed at length, and I think that we support it very much. There has been some resistance to move beyond a glass eel survey largely because of cost issues. If you do an appropriate life cycle survey, you need to age eels and so your cost would go up dramatically, but the technical committee certainly supports that.

MR. JOHN CLARK: I just wanted to follow up on what Dr. Stewart had said there. We've seen at our glass eel monitoring site the past two years have just been phenomenal in the number of eels that had come in. I know previous to that; the years before that many states had seen declines in the glass eels recruiting to their sampling sites.

There did look like there was perhaps the beginning of an overall decline in the numbers there, but they have come back to huge record numbers in the past two years. Where we were sampling, we used to just put the eels – it is a small system very close to the ocean, and we

would put the glass eels that we caught up into the pond where we would trap these.

Several years ago we had a grad student do a study on the silver eels coming out of those ponds. It became pretty clear there is really not that much habitat up there. This is just another example of the huge surplus of glass eels that do come into certain areas where their survival potential is probably extremely low. They are attracted to some of these areas where they would not do that well. I just wanted to bring that up.

MR. MILLER: I would just quickly comment that it seems to me that requiring a state or jurisdiction to do a life cycle survey simultaneous with opening a glass eel fishery seems a little to me like putting the cart before the horse. It seems to me that if you want to justify a glass eel fishery, you should have the life cycle survey information available to you first; just my comment.

DR. LOUIS B. DANIEL: Kind of adding on to Dr. Stewart's comments; a lot of the species that we manage hedge their bets. Batch-spawning sciaenids, they have a frequency of spawning maybe every week in hopes of having a single event that actually sets and the larvae settle out. We have hurricanes and we have all various different things that impact those spawning events.

We could talk about an overabundance of eel larvae or an overabundance of spot larvae or an overabundance of flounder larvae; to me, I struggle with this a lot. The question is does it have an effect on the population? That is the simple question that I don't think we can answer. My assumption is that there is such an abundance of elvers and natural mortality rates are so high; that I just don't see how this little bit of harvest at such an extraordinary value is going to have a measurable impact on the status of the stock.

To me that is the simple question that we have to answer here. I can't afford to do a full life cycle survey of eels, but I want an elver fishery. Am I out of luck? I don't necessarily think that is fair either, because I don't know if we'll ever know

what is it, 5,000 pounds, 10,000 pounds of elvers?

Who is to say that one pound of yellow eels isn't the equivalent of a pound of elvers? With the natural mortality rate, I would think that it would take a lot more than a pound of elvers to result in one yellow eel. You could probably get even more elvers for a pound of yellow eels. Those are the questions that I think we have to answer, and I think those are the questions that we are going to have to be able to explain to the public. But the rest of it is all speculation.

MR. WILLIAM GOLDSBOROUGH: I just want to toss out sort of an academic comment that from an ecological perspective, I think it would be wrong to characterize it as an overabundance or a surplus; that there is a method to the madness in nature, if you will. That abundance for any given habitat and the very high mortalities that are associated with it are all part of the process of developing and maintaining a strong gene pool that will vary up and down the coast depending on those habitats.

We might think in terms of being able to remove large numbers of those elvers as acceptable, because a lot of them perish, anyway. But that is an important part of the process and we can't select the ones that nature would have selected to die. In addition, the ones that do die don't just disappear, but they are eaten by something. This is part of the food web at work as well. They do serve as forage for other organisms.

MR. THOMAS FOTE: Well, Bill, kind of beat me to the punch. We sit here and talk about the large number and the large mortality, but that mortality is feeding trout, walleye, and largemouth bass in a lot of the freshwater lakes. They depend on that. When we start looking at – you know, this is the kind of discussion we got in menhaden years ago when we started looking at the forage species and what is involved in the ecosystem management.

We don't have the science to do that. We would love to have the money to do the surveys necessary. When I look at the staff in New Jersey down to 13 people and a budget; Louis mentioned yesterday \$210,000 – I mean Wilson

for the survey; I think that is almost 10 percent of New Jersey's Marine Fisheries budget.

There is no money. There is no money to do anything. It is a very difficult situation. But when we start talking about abundance of mortality, the reason we have abundance of mortality is because they're getting fed on by a lot of other creatures that depend on that in the ecosystem. Just don't throw out numbers and say, well, you can do this and it won't have any consequences. Whenever you withdraw something from the system, it has consequences up and down the food chain. Let's just keep that in mind.

CHAIRMAN STOCKWELL: Okay, I've got three more hands and then I want to go to the audience and see if there are any questions out there. Then we really do have a time management issue, because we need to go to Brad's presentation and there is a lot more work to do this morning.

MR. ABBOTT: Thank you, Mr. Chairman, for allowing me to speak for a second time. This is such an interesting issue that we're dealing with. I'll be like Tom Fote and go back in history and remember when we took over management of eels, some of us wondered why we are managing eels, we don't know a lot about them. We really didn't want much to do with them. I confess that I didn't know very much about them.

In fact, I asked my colleagues this morning eels when they spawned, whether they had live young or whether they laid eggs. I didn't know the answer and I don't think they did either. But I did discover through the internet, Wikipedia, that an eel lays half a million to 4 million eggs down in the Sargasso Sea, and that those small things go through various life stages and they come up the coast.

The eels that migrate from Maine and New Hampshire and all the states don't necessarily deposit their young or the young aren't deposited back in their natal rivers. If we talk about the eels that in the past two years we've seen abundance of elvers return, that has nothing to do with the recent fishery, because I

remember asking Mr. Chase at the last meeting about the life cycle.

We talked about a time span of 15 years. We could study the life history of eels from here to hell and gone and long after I'm dead and buried and you will still be about at the same place that you are now. We could ask ourselves this morning what are we doing today and why do we have to be doing it? Some people would tell you there is no reason to do any of this. Some people would say we ought to do habitat work.

I looked on Wikipedia again and the Department of Natural Resources in South Carolina and came up with 20 some recommendations on what we could do to affect the eel population; one of them being get rid of blue and channel catfish in their rivers. But the habitat that we deal with goes hundreds of miles away from the coast. These glass eels; they are just migrating for a short while through the areas where they are being caught. Do we need to do something or do we need not to do anything?

But the very fact is taking eels out of one jurisdiction and one state affects all the states. It affects all the states. Again, everyone can make a persuasive argument to bolster what they believe is the right thing to do. We will never have another – well, we won't have another but we'll always be at this point of whether we should be making a decision regarding eels or not.

But from the very moment that we got into eel management, I recall that the Canadians primarily were telling us that populations had dwindled in the Great Lakes to such a great extent. I think there were some conversations and meetings between the states. That was a long time ago, in the early 2000's.

But are we going to fish or cut bait today regarding glass eels? That is where we should be focusing our attention. If we don't think there is a problem, if we don't think there is a problem, what are we doing here today?

MR. NOWALSKY: I certainly appreciate all the comments we've heard recently that goes beyond just the working group's

recommendation itself and well into the discussion that we're going to be having as the morning goes on. I certainly appreciate as well the impetus that has been placed on the discussion of glass eels themselves. But just as we're getting to the end of wrapping up the working group discussion, I want to say that I think this document was exceptionally helpful to me.

Going back to – I certainly don't have a record of what the sentiment was in the room at the time; but going back to the minutes that we had approved, I believe the charge was to – specifically the words of the acting chairman at the time was that the working group will pick through the four issues we included, the numerous options under those four issues and provide recommendations for this board to come back with options; as well as that it is difficult to predict where the working group is going to go, but we may require an addendum to do so.

I know when I come into a board meeting and I see final action on a piece of paper, it is certainly desirable for me to go home and tell my constituents we did it, we're done with it, we're moving on to something else. But I think the very fact that the working group laid out some recommendations for options, as well as a path forward for us, gives us the confidence to say, we're on a path, we're on a journey, we're not just here today to say we're done with this and we can move on to something else. I appreciate that effort.

CHAIRMAN STOCKWELL: Okay, Steve you have the last word.

MR. STEPHEN TRAIN: Thank you Mr. Chairman. I have listened to a lot of people around the room that know an awful lot more about this eel fishery than I ever will. I'm not an eel fisherman. I've got friends that are; I've witnessed them. We can blame habitat, we can blame climate, and we can blame fishing effort.

But when you see these eels gather up, as John described, in front of a dam or a fishway or something, that there are so many that if they actually entered that stream and the pond on the other side, the people that lived in that

neighborhood would move if they actually survived to adulthood. The natural mortality is way beyond what the fish food web is eating. This species overproduces like you would not believe. To watch those die and wither away instead of be part of a coastal economy to me appears more wasteful than anything else we could do as managers of a fishery. Thank you.

CHAIRMAN STOCKWELL: How many folks from the audience would like to comment? Jeff, and then please state your name for the record.

MR. JEFFREY PIERCE: Thank you, Mr. Chair. My name is Jeffrey Pierce; I'm the Executive Director of the Maine Elver Fishermen's Association. We appreciate the working group's efforts. As we look at quota management, I'm looking at a document that was produced yesterday. It is dated August 6th. I'd like everybody to take a look at something before we discuss quota management.

It is on Page 2, and under quota management that is the last section; it talks about the DB-SRA models. It says in the last sentence; "It should be stressed that the peer review did not approve DBS-RA models for management. Therefore, the projections are for visualization purposes only. It should not be expected to produce reasonable points of biomass over time." All these graphs, are we saying they're wrong or they are inaccurate? They shouldn't have been produced if they are just for visual aids. We can put graphs anyplace? If these estimates are not accurate, why do we have them? It is very concerning to us.

CHAIRMAN STOCKWELL: Jeff, you are making comments on a presentation that hasn't been made yet. Rick.

MR ALLEN: Thank you, Mr. Chairman. I would like to read into the record a letter from Kenneth Oliveira; PhD, Associate Professor of Biology, University of Massachusetts, Dartmouth, Department of Biology. This is an argument for a limited glass eel fishery to support aquaculture. "I am writing to support the request of the American Eel Farm."

CHAIRMAN STOCKWELL: I understand this is a two-page letter. In the interest of time; we're chewing up a lot of our time this morning. I am going to ask you to refer that letter. We'll have copies made and distributed to the board. Please make a comment.

MR. ALLEN: May I highlight the four points of support? To my knowledge, AEF is the only active eel aquaculture facility in the U.S. If this venture were established several benefits for the conservation of American eel could be realized. One, the elimination of transported eels would reduce the spread of parasites and diseases.

The swim bladder parasite found in American eels is suspected to having been introduced to Lake Ontario by the transport of glass eels. Two, there would be no net increase in glass eel harvest since those currently purchased from Maine would be replaced by North Carolina glass eels.

Three, the use of glass eels that are typically subject to high natural mortality for the local USA production of market size eels; yellow phase, would greatly reduce the need for fisheries for the yellow and silver phase eels. These older life stages have a lower natural mortality rate and a higher probability of spawning, making them more valuable to the population.

Four, the collection of glass eels in North Carolina, if done correctly, could provide much needed data on the recruitment of the species, for example, timing of the migration, numbers per season et cetera, to the South Atlantic Region. Each Atlantic state is required to monitor glass eel recruitment on an annual basis.

This has created a burden on several Atlantic coast fishery agencies that are not equipped or funded to do these surveys. The dovetailing of the glass eel harvest with the monitoring efforts of the respected state agency could provide a cost savings for the state of North Carolina while generating the data needed to help manage this species.

I would just like to make the comment that American Eel Farm currently has no eels in it.

In 2000 Mr. George Kuntz came here. At that time it was brought to his attention that there was some support from the Atlantic States Marine Fisheries for aquaculture. He invested 1.2 million dollars of his money. For us to compete with the Asian market, we need to have an advantage. The only advantage that we would have would be able to harvest our own eels. The benefit of harvesting our own eels would allow the American Eel Farm to restart and refill its tanks. If we would have to wait a three-year period for a survey, that would be detrimental to the opportunity that is there for aquaculture, so we've done our part. We ask that the board does their part and support us. Thank you.

CHAIRMAN STOCKWELL: Moving on to Brad. Do you have a burning question, Pat?

MR. PATRICK H. AUGUSTINE: Very burning, Mr. Chairman. Those gentlemen have been allowed to speak twice. I've had some conversations with them. The burning question is do we support aquaculture, ASMFC support aquaculture and eels? If we do, what is it we can do to give this enterprise an opportunity to survive or die? That is question one.

Question two, if we don't support it, why can't we make a statement we just flat out don't support it and tell him to go away and lose his money? It is ludicrous to sit here and talk about

–

and this is a statement now, Mr. Chairman – to talk about the status of eels being depleted in our opening statement. The public says it was depleted and yet we have all these glass eels.

The public is not being as informed as we are around the table. What does depleted mean? What cycle of eels is depleted? Is it the reproductive eel that is eight years or older; is that what is depleted? What stage is it? I have a pretty good clue. But in listening around the table and listening to Mr. Abbott, I'm wondering if he is right.

We're sitting here spinning our wheels. We've got two documents in front of us; one that says this is a draft, a working document did an outstanding job of finding areas that were gray and had to be cleared up in the amendment. I'm

sitting here now an hour into this meeting and have a sense I want to go ahead and postpone the whole damned thing and table it, because those are the questions that have been raised.

I look around the table and we have a bunch of blank faces, Mr. Chairman. I know your intention was to go ahead and move this aside and move forward with another addendum in a different venue, but I need the basic questions asked now. One, we could cause some action to occur, one; eel farming could take place or not. I think we need to address that before this meeting ends today.

Secondly, are we really going to address the problem of the availability of eels for all states? That is another burning question. It has been since we started talking about this procedure. With menhaden, we now have one state that has 85 percent of the quota. The state of New York that used to harvest the greatest number of menhaden for 20 or 30 years; 80 or 90 years ago; we have less than 200,000 pounds. I have one lobsterman who does 350,000 pounds by himself.

Here we go down another road with another species, creating another monster that we're going to have to live with, or people that follow us after. Mr. Chairman, if I can get the answer to those two questions either now or off line, let's let the public know where we're going with this, whether it is a viable industry or not and then take the next move. If we don't get this cleared up pretty quickly, I'm going to move to table the whole damned thing. Thank you.

CHAIRMAN STOCKWELL: Well, Pat, you ask good questions and they are what will tee off the second part of this meeting. We're going to go through Brad's report, take questions and then take a break and regroup. Take it away, Brad.

MR. CHASE: Thank you and good morning. I am going to report on the Stock Assessment Subcommittee's communications in the last few months in response to requests from the working group. We met via conference call I think three times in June and July, and we had just numerous exchanges of e-mails back and forth.

The technical committee did not get together to discuss this. The timeframe was too short. I'm just going to report on the Stock Assessment Subcommittee. Okay, when the request came in, it is fair to say that each member of the subcommittee had concerns over the idea of finding ways to open new fisheries or keep harvest at the current levels. This was a unanimous concern of each member.

Really, this quote here from the stock assessment I think highlights that concern. Really, the bottom line was to find ways to reduce mortality for all fisheries. I am going to run through the general recommendations that came out of the Stock Assessment Subcommittee's communications.

Number one is that the status quo is not recommended. We've heard this really from the stock assessment as well as the plan development team. That is clear. Number two is the objective of the addendum is to reduce mortality of all life stages with a goal of allowing more silver eels to escape and spawn.

If mortality is to be reduced, then fewer eels need to be harvested. All fisheries in all regions must contribute to the reduction. Number three, opening up any new fisheries on any life stage would be inconsistent with the recommendations of the benchmark stock assessment and peer review panel.

Number four, starting multi-stage surveys after the glass eel fishery is opened would not be adequate. To follow the precautionary approach, a state should have to implement multi-stage survey monitoring programs at least three to seven years before being allowed a glass eel fishery in order to verify that further harm to the stock would not occur.

Number five, the only way to guarantee reduction in mortality is through use of quotas – and this is for all fisheries – with specific allocations and payback provisions. The states should not be allowed to increase landings from current levels. For both the glass and the yellow eel fisheries, the SAS recommends that

we use the terminal year of the stock assessment which end in 2010.

For general recommendations, for the yellow eel fishery the quota should not be based on landings from the 1980s, because this was a period of very high fishing pressure and catch. The quota should not be based again on landings for years after 2010, because this was the last year of the stock assessment. Landings have continued to increase in the yellow eel fishery since 2010.

In the glass eel fishery, similarly the quota should not be harvested. The landings data should not be used after 2010; 2012 in particular was a year at which the fishery changed dramatically with very high prices and was marked by higher effort landings and illegal harvest. Setting catch limits based on recent average catches leads to higher probability of overfishing and depleted populations especially when populations are already at low levels.

We know this from other fisheries and there has been some recent scientific literature that has come out showing that this is a big concern, particularly if we focus on just the most recent years. Number six, changes in mesh sizes and minimum sizes alone may not achieve the reduction in mortality necessary to rebuild the stock.

It is uncertain how adult eel escapement will respond to this action. SAS does not oppose the use of minimum sizes and mesh changes, but just wants to emphasize that this alone will not achieve what we're hoping to do, and so we need to match this with quotas. Number seven, increasing the survival of silver eels is crucial in ensuring the highest contribution to the spawning stock.

This was really the main goal of Addendum 2. As most of you know, really no conservation measures came out of Addendum 2 to address this, so it is still on the table and still very important. Number eight, the SAS strongly supports the collection of additional fisheries-dependent and independent data to aid in the development of management programs for the use in future stock assessments.

This, of course, focuses on the life history cycle in those surveys. For quota management, the working group requested input from the SAS on harvest levels that might be appropriate given the associated stock levels. The SAS had very little time to address this, but we did. We used the DBSRA, the depletion-based stock reduction analysis model, to do this.

Jeff Brust from New Jersey did a fantastic job putting this together and updating the stock assessment mode. The SAS overall I think really responded very quickly to get something for you to see today. This model really comes out of the west coast. It is a hybrid of a surplus stock reduction models. It has been used more and more on the west coast for data-poor situations.

We did apply it for the stock assessment. To Jeff's point earlier; the peer review panel did not accept it for use for reference points that could be used for management purposes, but the peer review panel did strongly endorse the selection of this model and felt that it was very encouraged by the potential to use this model in the future.

We thought it was a good choice to go back and look at potential biomass levels in the future given different harvest scenarios. I am flying through this fairly quickly, so if you have any questions on the model, I would be happy to answer them. It should be stressed the peer review panel did not approve the model for management; therefore, the projections are for visualization purposes only, and some results may not represent credible estimates of biomass over time.

This point, it is a little confusing but again it produced reference points for biomass and fishing mortality that were not accepted by the peer review panel. But it did provide useful information on how the stock might respond to different harvest levels. Let me run through some potential scenarios. This table shows in the average harvest column what was actually harvested coastwide for yellow eels; most recently 2009 to 2011, almost a million pound fishery on the east coast.

Then we have two other scenarios, 2007 to 2011 and 2007 to 2010; and then the other columns show what we would have if we had reductions from that; 10 percent, 25 percent and 50 percent. The stock assessment gave us pretty clear guidance that we had to move back from present levels of harvest. We wanted to give the board some ideas of how this might look using this model. Here is the first graph that shows 2009 to 2011 with present landings with no reductions.

The red line is the median estimate projected into the future. The dotted line is the 75th percentile, and the hash line is a 25th percentile. The model was run and it forecasted the present biomass levels into the future. You can see where the median level for this level of harvest, we have very modest gains moving out almost 30 years into the future.

Here it is 2007 to 2011 without reductions. Again, the Y axis is spawning stock biomass in millions of pounds starting in 2000 moving to 2030. The median here starts to show some gains with this level of harvest; sharp gains were the 75th percentile and moving down to nothing with the 25th.

Here is 2007 to 2010. The SAS felt that again the 2010 should be the last year used, because that was the last year used in the stock assessment. This was a scenario that we wanted to show you. The median level shows decent increases, and the 25th percentile is a flat line moving out into the future. Okay, so here is the 10 percent reduction from that last scenario, 2007 to 2010. The same idea hauling back just 10 percent results in increases at all across 25th to 75th percentile and in decent gains with the median.

Here is a 25 percent reduction from that 2007 to 2010, and here is a 50 percent reduction from 2007 to 2010 with sharp gains under all scenarios. This would get the stock fairly close to the level that occurred in the 1970s when we had some very high landings up and down the east coast. That is about where it would get us back to is near that peak biomass.

This is something that was done really in the past week or so, and so we could entertain all

types of requests and look at a number of different scenarios, but I wanted to show you what this model can do and what potential it has. Here is a graph that shows the biomass estimates from the model going back to 1880, and this gives us a good idea of what has happened in the fishery.

Some folks wonder is the stock depleted; have we seen depletion occurring? If you look at that rise from the seventies and eighties; that was the period where the European export market took off, prices for our fishermen went from about 50 cents a pound to two dollars a pound, effort increased and harvest really increased. I think the SAS feels that period really contributed to our present levels of abundance, which we do consider depleted.

That level of harvest was something that was probably damaging, and we should probably try to avoid getting back to those levels. You can see we've come down to a low level from then and we are rebuilding. Under different levels of harvest, you can see we increase at different levels here. All the previous graphs are overlaid on the right side of this graph.

Here is a different scenario I showed earlier, just showing from 2000 to 2030. The red is the harvest from 2007 to 2010. That is the median level for that area and you can see sharp increases at the 50 percent cut and very moderate increases with the status quo, status quo for 2009 to 2011.

That was a very quick presentation on the model estimates for harvest levels and I would be happy to entertain questions on those afterwards. Let me shift to the question everyone is talking about, the life stage quota transfer; shifting yellow eel quota to glass eels. We received this request and it was a difficult discussion. There were members that felt that we simply did not have the information to provide an answer to this question.

We went back and we worked on it. We actually assembled a model, a very simple survivor model that would allow us to forecast changes in survival for eels at each cohort and what would be left by applying mortality

estimates to each age. We have this tool available; it is something we can work on.

I'm not going to present it right now, because we felt it had so many assumptions and it really has limitations given the input data. Our recommendations are while it may be possible to conduct conservation equivalency analyses on the life stage of American eel, this analysis would be based on a multitude of assumptions and have a high degree of uncertainty.

Number two, states and jurisdictions do not currently collect adequate data to support this type of management program. Given the spatial heterogeneity of eel life history, the SAS could only produce estimates for geographic sub-regions where there are data to support analyses. Furthermore, this type of analysis could result in different management methods applied along the coast.

Really, every watershed could produce different levels of natural mortality and age-specific survival. The information we have presently is just very limited to approach this type of analysis. Number three, the SAS unanimously and firmly does not support a one-to-one transfer in pounds of current yellow eel harvest to potential glass eel harvest.

This is really a precautionary approach. We have concerns over not having the right information and not producing the right recommendations. Our idea was to have a cap or a proportion transferred as opposed to a one-to-one transfer. Number four, if a conservational equivalency program were to be developed, the SAS recommends the use of a conservative transfer rate until there is sufficient data to consider expansion, with harvest capped at a certain amount.

One possible approach could be to evaluate the complete transfer of yellow eel quota to a glass eel fishery after three years of a development of a new glass eel fishery, provided the required monitoring continues in the fishery on all other life stages prohibited within the jurisdictional waters. The idea here is again until you have a survey, you really don't know what you could possibly do to the fishery.

We are recommending having survey information in that jurisdiction before the glass eel transfer is made, and then with three years of data you could begin to evaluate what you have done and make further recommendation. You can see the SAS is somewhat resistant, almost reluctant to engage in this analysis because the information just isn't there. At the same time we did produce that survival model, and we realize that theoretically it can be done. We would like to work with the board moving forward. But with the time that we had and given how important this issue is, we presented a very conservative approach. Thank you.

CHAIRMAN STOCKWELL: Thank you, Brad, and for the rest of the subcommittee for your above-and-beyond effort to respond to the data request from the working group. I've got Ritchie's hand.

MR. G. RITCHIE WHITE: Thank you, Mr. Chairman. I have two brief questions. First, the recommendation is to reduce mortality to the 2010 level for the glass eel fishery. Is that about 4,000 pounds coastwide?

MR. CHASE: That wasn't a recommendation, but it was to use the data up to 2010 to develop your recommendations. It wasn't to use just that year, but your analyses should end with 2010.

MR. WHITE: Second question; in the recommendation of not supporting opening of new fisheries, did that assume that opening new fisheries would increase mortality? If you open new fisheries and reduce mortality at the same time, would there still be opposition to opening new fisheries?

MR. CHASE: That is a good question. Really, it comes down to the unknown. I think the SAS was just – we saw some momentum in the PDT towards reducing mortality, pulling back from present harvest levels, and then this was a shift to open fisheries. I think the SAS was a little bit concerned about this approach and the unknowns. I think that we're not completely against the concept, and we would entertain requests to do analyses, but at this point the

information is just not there to really allow us to say, yes, let's go ahead and do this.

MR. WILLIAM A. ADLER: In listening to the response here, I see a lot of unknown. Here we are trying to put some rules in, I guess. I am listening or I see in one place here it says that the visualization purposes only – that is one place. I also see that there is a multitude of assumptions and have a high degree of uncertainty.

Some other things are unknown. Some of the information could only produce estimates. Once again, I'm trying to figure out, okay, so where are we? Do we have scientific information that we need to go forward and put some of these things in? Somehow I am just not seeing it, but thank you.

MR. CHASE: I think the bottom line that comes out of the stock assessment is we have to kill fewer fish. I think that evidence to us is clear. The stock is depleted, and so we have to bring back present harvest levels in the yellow eel fishery and the glass eel fishery. That to the SAS leads to quota management.

The DB-SRA was one of many approaches we reviewed in the stock assessment. It was received well by the peer review panel. Their language was that they were very encouraged by the selection, the use and the inputs in the DB-SRA model. Projections will always have uncertainty; that is the way it is.

We view it as a tool that will gain use and gain confidence with the next stock assessment. For now it gives us guidance on how we can pull back from present stock levels. I understand your concerns with uncertainty. The conversion from yellow eels to glass eels is even more difficult. But if we can segment the two concepts, the yellow eel quota and the conversion, I think we can possibly make some progress.

REPRESENTATIVE CRAIG A. MINER: I am wondering whether some type of a grow-out opportunity coastwide might mitigate the concern that you have about depletion. Listening to two individuals speak already about

mortality at the glass eel stage, in some cases perhaps based on not being able to get beyond a structure or something else, isn't there an abundance there that if it was a targeted fishery in certain areas that we actually can kind of beat the system by not having those die and go to waste, but instead either harvest some of those either for an aquaculture opportunity or aquaculture plus redistribution opportunity?

It just seems to me that if we do this solely based on reducing mortality numbers at the adult stage, we're not necessarily taking care of the environmental problem that might have actually been what was referred to very early on. I guess I am asking you what your opinion might be about that kind of a model rather than sitting back and waiting for three years by reducing the amount of take.

MR. CHASE: Well, again the SAS is going to say we have to reduce mortality. We have to bring back our present harvest levels. We did not discuss the idea of innovations such as culture in the U.S. I think it is a fascinating concept and I think we would be happy to entertain recommendations for analyses. That is something we can address, but we did not discuss that. Personally I think there is some potential there.

REPRESENTATIVE MINER: I was having a conversation with Dave Simpson, and I don't know if this is a phenomenon that is happening coastwide, but in the state of Connecticut we've had a number of conversations about closing fish hatcheries that have historically been used for rearing trout for stocking programs.

It just seemed to me that we may actually have the infrastructure in place in Connecticut where we could take a certain population of glass eels and perhaps either by leasing or whatever develop a farm to create bait where maybe flavor and color aren't that important and at the same time reestablish a population back into a natural spawning area. It just seems to me that if we look at the same theoretical science model for all these species, I'm not sure we don't end up in the same place. Why not look at something different? Do you need a model to

actually model what I'm talking about or can you do it from some theoretical idea?

MR. CHASE: I think you would need analysis. We're recommending that we reduce mortality; that we kill fewer eels. What you're suggesting is to take more eels. We would want to assess that. We can discuss it theoretically, but I think we would need analysis to support what level of that type of redistribution would be appropriate.

MR. FEIGENBAUM: To my fellow commissioners, I would like to point out something that some of you might be aware of, but I just hope it is very clear. The DB-RSA model is basically just telling us what technical committees have been for the last 30 years with the understanding that technical committees spike so much, but a model need to be smooth.

As Jeff Brust had explained to me, what the model basically does is it plugs in the technical committees from the past, and then it smoothes them out in order to create an illustration of where stocks are. Tom yesterday from New Jersey made the point that the public loses confidence in a lot of the work we do, because we present them a population estimate based on technical committees that absolutely make zero accounting for the effort.

Of course, Marty and others have explained really for years and years to this board that the ban on the horseshoe crab harvesting has in and of itself reduced eel fishing effort and eel fishing technical committees more than anything that this board has ever done or could do. I see a few heads shaking around the table in agreement.

Brad, I have a question for you. If you were to impose a coast-wide quota on yellow eels, three years from now what model would you use to determine whether the populations are increasing. As I believe Jeff has acknowledge to me, you can't use the DB-SRA model at that time; because if we mandate that technical committees go down, then three years from now the DB-SRA model is going to tell us that stocks have gone down.

That is what the model does. It basically shows us what the technical committees have been and

converts it to a statistical, flatter diagram. Brad you said something; you pointed out that model shows that we had a harvest high in the seventies, and you said we've come down from that and we are rebuilding.

In fact, that model shows that we've been rebuilding for 14 years; and during the last 14 years, the stocks are up 41 percent. It brings us really to Pat's question, which is the most important question, what does depletion mean? We have 14 years of rebuilding at a 41 percent level, which leads to a conclusion that we've been depleted.

I've asked a question of the Chairman in the past or our Executive Director, what is the definition of depletion? There really is none. It could mean exhaustion; we know the stocks aren't exhausted. Recruitment has been steady for 30 years. It can also mean significantly reduced. I grant you that based on what we know about habitat loss and the excessive harvesting in the seventies, the stocks likely are substantially reduced from where they have been.

All of which leads to one conclusion that might sound a little controversial, but I hope my fellow commissioners will hear me out. We keep saying that the goal here is to reduce fishing mortality, but frankly in my opinion that is not really an appropriate goal. The appropriate goal is to ensure that there is no increase in fishing mortality that would potentially bring us back to where we were in the seventies, which we think caused the problem in the first place.

We're in a good place right now, particularly in the yellow eels which have not shown a growth in harvest or effort in some 14 or 15 years. Really, we would be making a great accomplishment and doing the species a great service in the yellow eel segment of the equation if we could just ensure that there is no increase; that we don't go back to the seventies.

Someone said there is a lobsterman in New York that is harvesting 250,000 pounds a season, one boat. The entire coast of USA is harvesting less than a million pounds of eels. It is probably the smallest overall harvest of any species this board manages, yet the Fish and Wildlife Service told

us it is the most ubiquitous species on the entire freshwater system of the United States east coast.

There is some really good stuff in our addendum today. The working group has come up with a lot of low hanging fruit. This group can accomplish today a lot of really good things to put the brakes, to lock into place a scenario where we do not go back to the seventies. But to suggest that we need to reduce from some recent average, which is the lowest point we've been in recent history, to go further down from there based on the projections of a DB-SRA model that has been identified as not appropriate for use for management, it seems like the Stock Assessment Committee – I understand they're doing their job, but they are taking a very – you call it precautionary, but I would respectfully suggest that it is starting to sound a little like it is an excessively cautionary approach.

We also have to be cautionary about the economy of a fishery that soon will reach such a low point that it is just not sustainable commercially. We cannot have an eel industry along an entire coast if the technical committees come down to something like 500,000 or 600,000 pounds. It is just not enough resource to even support the few commercial interests that are still in the fishery.

MR. BILL ARCHAMBAULT: Just a quick comment and a question for Brad. We've been in the salmon business for a long time in the Fish and Wildlife Service; and although we have seen a couple of good year classes of parr and smoltz going out, I don't get too excited anymore when I see one or two good year classes, because that does not necessarily correlate with a good return of adults.

In particular in the Great Lakes, although you folks and those on the east coast here have seen a couple of good years of elvers and glass eels, they have not seen those numbers in the Great Lakes, and they haven't seen those numbers in decades. We really need to consider a conservative approach here. There is a lot going on with the eel outside of the harvest.

We have some pretty major rivers on the east coast. We're dealing with some major FERC relicensing right now, and our state partners are helping a lot. There should be some real conservation benefits to be gained there but we've got a lot of work to do. In particular regards to using hatcheries, having been in the hatchery business and again in the salmon realm for a long time, we're really in a different place here. Taking fish out of the wild to use in a hatchery to grow out those fish would probably not be the way to go.

It can identify a whole realm of problems, domestication, disease and so forth. While I do understand the aquaculture role, and there is a role for aquaculture here, I would be very hesitant to approve any type of hatchery work with regards to a wild population. That could lead to some big problems.

Again, the uncertainties in a diadromous or catadromous fish really cannot – you can't get excited about seeing one or two year classes. That is a good sign and hopefully that is a good trend, but you have got to look across a generation. That is something we need to consider. Brad, on the west coast you mention they are using this model. Can you talk a little bit about what they are using the model for and some of the parameters you might need to work out here to refine that model.

MR. CHASE: Yes, it really originated for data-poor situations where you mainly have harvest data. It has been used I think in rockfish fisheries and those type of fisheries, long-lived species. Really, if I can get back to Mitch's comment and to address yours as well at the same time, I would like to defend the model a little bit, because the peer review panel actually had some very supportive language for this.

They endorsed the use of the selection of the model and they were very encouraged by the results. When we say it was not accepted, what happened was the technical committee recommended that given the assessment results, the stock should be declared overfished and that overfishing was occurring. The Peer Review Panel did not accept this conclusion. What they did not accept was the reference points

generated from the model, the biomass and fishing mortality at MSY.

The model results were not quite appropriate or ready to produce reference points that could be used for management purposes. I would say that the model is going to be a useful tool. I think the peer review panel had a lot of support for the model. In addition, it does use much more than harvest levels. It looks at carrying capacity; it looks at natural mortality rates which are inputs, and it also uses coast-wide indices of abundance.

We had as an input 1990 to 2010 the coast-wide indices for yellow eel abundance. Those indices can tune the model and it has that potential to look forward as well with the projections. We also looked at over 30 coast-wide indices independent of the model that went into the stock assessment. When we ended up with a depleted status, there was a lot of consideration and discussion for even a more severe status. The Peer Review Panel reined us in and brought us back to depleted.

What the model needs looking forward, because I really think for the next stock assessment it is going to grow, it is going to improve, and I think it going to become a tool that we do use; it needs better natural mortality rates. We need a better understanding of carrying capacity, which means habitat capacity.

These inputs will be very important to make a better model with high confidence. The model is run with 10,000 iterations of a range of input values. Then it rejects the ones that are just absurd. The remaining iterations are used to actually produce the projections. It does get rid of, in my mind, a lot of the uncertainty that people have. The end results are really tuned down to credible projections. Then on top of that, you have your confidence levels around the median. I hope that answers the questions and also responds to some of Mitch's comments.

DR. DANIEL: I have a few comments. The first is the intriguing question of harvesting the eels in areas where they would not normally be able to move upstream. I would just caution us about that approach, because I wouldn't want to do anything that would promote not restoring

habitat. If we were to find these areas where we can harvest these eels and then all of a sudden we have an opportunity to open it up, if someone is using that area as their eel harvesting area, you are going to have pushback from those types of restoration efforts. That would make me nervous.

I just am looking at the status state of our fisheries, the opportunities for aquaculture; not just in North Carolina but wherever, the creation of jobs. This is an opportunity unlike really any other fishery that I am aware of. When I look at the value of this fishery to Maine; like I've said before, it is worth more than our two top fisheries in North Carolina combined; shrimp and crabs. That is a pretty spectacular value. We've got to figure out a way to make this work.

All we're talking about is we can't do it. That is a lot of what I'm hearing is, we can't do it. We can do it. We should do it. I do support the technical committee. I support your defense of the thing. But one statement though in the technical committee report that I found kind of intriguing was after Mr. Adler pointed out all the uncertainties, and that is inherent in virtually any stock assessment. But then for the Technical committee to come back and say that they firmly oppose a one-to-one; that seems kind of contrary to me.

With all the uncertainty and all the concern about the information in the assessment, to come back with anything firm seems a little out of character of those previous comments. I don't think it is; I don't think anything should be firm at this point. But I think there is a conversion rate. If it is not one-to-one, it is maybe two-to-one, maybe one-to-two.

I don't know what the number should be, but that is the number we need to figure out. I would be cautious moving forward with this. I certainly don't disagree that we need to reduce harvest on these larger life stages, but just keep in the back of your mind the shrimp fishery. Just keep in the back of your mind the shrimp trawl industry and the bycatch associated with that industry, and the move forward that we've made in this commission with the weakfish

stock assessment, the croaker assessments; where we don't even consider that significant amount of bycatch as even being a part of the management decision-making process.

That to me; there are some parallels to this elver fishery. That natural mortality rate is so extraordinarily high. I hate to say, well, if we don't kill them, something will eat them. Well, that is good; right, Tom that something else eats them. But I'm not really concerned about the bluegills that are sitting at the dam picking them off as they come across. I don't manage bluegills. All right, we can make more blue gills. I am concerned about marine fisheries, and I'm concerned about marine fisheries economy and economics. I think this gives us a great opportunity.

MR. CHASE: Let me just say quickly that I wish we had a few more days to really work on that language. It literally just was evolved yesterday, maybe Friday. We had a lot of discussion on the one-to-one conversion and how would you actually put that transfer into play. We all felt we should be very conservative until we had better information.

MR. CLARK: Thank you, Mr. Chair; great presentation, Brad. I just had a question on the graph you have up there. Now is that as Mitch referred to a part of the DB-SRA, because it seems to be showing that at current harvest levels, it is sustainable; that as you go in time, the stock does not decrease.

MR. CHASE: Yes, John, those are projections from the DB-SRA. The harvest from 2009 to 2011 shows the least percent increase moving forward. That is correct; it is a modest increase. We also felt that reflects very high levels in the yellow eel fishery. That would be just 2009 to 2011.

MR. CLARK: Right; but based on the model, the median quota there is not showing any decrease in the landings level over time; actually showing a slight increase even at the 942,000 pound level.

MR. CHASE: Right; that is correct, but I will remind you that the 25th percentile hits the X-

axis. The median shows a modest increase, 75th shows better, but the 25th is going down to nowhere.

MR. CLARK: Yes, I saw that.

MR. CHASE: We should keep that in mind. The further you get from your end year, your projections have greater uncertainty.

MR. CLARK: Right. I just had a comment about the aquaculture. Just to remind everybody that Canada has been – it is somewhat along the aquaculture line. They have been stocking glass eels from the Maritimes into tributaries of the St. Lawrence now for I think over ten years. Mitch, what is it; like 15 years they've been doing that?

MR. FEIGENBAUM: Well, it has been happening for the better part of the decade, but it did stop in the past years because as the gentlemen's letter from Ken Oliveira pointed out, there is concern that the parasite was introduced into the Great Lakes because of it. The eels are there and are doing well. They are also not becoming as female as would be expected of the Great Lake. There are a lot of questions being raised about this program.

MR. DAVID SIMPSON: Thanks, Mr. Chair, and thanks for the presentations, it is really helpful. I still struggle with eel fishery management and trying to put it in perspective, you know, those losses to other sources of mortality. This issue comes up with every species. It comes up more often than I can stand sometimes for lobster.

But I can always look at our indices of abundance by size right to the gauge; and then I can see immediately after the gauge the tremendous drop in abundance. That reassures me that, yes, there is a role in fishing and there is some leverage, as a former employee used to like to say, in fishery management to make the stock respond.

I don't have that same comfort level with eels; trying to understand what proportion of the mortality are we actually able to manage here; in particular, things like turbine mortality, for any kind of system where the eels that we work very hard to get up past an obstacle have to go back

down through. What percentage of eels that pass through a turbine – and I know it is size-related, but what percentage will actually survive? Help me with the perspective that I need for fishing versus all these other human-induced causes of mortality.

MR. CHASE: I'll try. Obviously, we're data poor here. We have very poor age structure data, so we don't have a great sense of what our fishing mortality is by age. We don't really have that coastwide. What we have are indices of abundance, catch and effort indices, a few age structure sampling programs. We've pieced all that together. Other fisheries have much more.

They have much better age structure data. That is why when we encourage life history surveys, we're trying to get that information. If you partition mortality, we can picture that natural mortality is very high for a species like this. That is their strategy; send a lot of juveniles to the coast.

Then they are going to experience fishing mortality and then things like turbine mortality, pollution, lack of habitat; all these things contribute. Climate change is a concern on high mortality for eels in the marine stage. It is something we haven't talked about much so far today, but we have no assessment on what the mortality is for the leptocephali while they're at sea.

If we try to assign mortality levels to glass eels, we're still not addressing what happens before they arrive. They can migrate for a year and a half from the Sargasso Sea to our coastline. We have no assessments for that life stage mortality, and so that is very important. If we look at a conversion, we're going to have to develop a model that assumes mortality levels at each age, and that is going to be difficult.

Your question on turbine mortality; there are studies out there that assign mortality estimates, and it is, of course, valuable to the turbine type in the watershed. But it can be high; it can be over 50 percent. It is something, it is very important; it has to be on the list. I think that those who work with FERC and work with these relicensing, they're dealing with that issue.

MR SIMPSON: Just a shot in the dark in a system that has a dam and a turbine facility in it; is the fishing mortality 10 percent, half, three-quarters of the mortality of that population; how much leverage do we have here?

MR. CHASE: Great question. Again, I'm a stuck record. We don't have that information; but if you look back to Jessup's study on glass eels in a Nova Scotia stream, he found very high natural mortality, as you would expect. He also attributed this in part to very low water pH in that stream, as well as the impediment of the first berry these eels had would cause them to delay their migration and increase predation at that point.

His recommendation was that you could approach a system like that where you had very high natural mortality, anyways; or if you had turbines that would affect them later on, that would be a system at which you could support a higher level of harvest in the glass eels. Those are type of watershed-based decisions that I think this board can consider.

MR. MARIUS SIETSE BOUW: Yes, in Europe they have – in Holland they did a test and they lose about 80 percent through turbine mortality; but now they designed a new turbine that is 100 percent stressful. They have designed a turbine now, yes. It is possible to do something about it, but it is a lot of money. The turbine mortality is very, very high.

CHAIRMAN STOCKWELL: Okay, I see Rob's hand and then we are going to go to the audience for any comments specific to Brad's presentation. Then we're going to take a break to regroup.

MR. O'REILLY: Brad, my question is – I'm looking at what was mentioned earlier, the 30-year index of abundance for yellow phase American eels along the Atlantic coast. It ends in 2010, and I know that the assessment is through 2010. But my question would be has 2011 and 2012 data been applied yet? If so, how does that look? When you do look at the 30 years, it is not flat.

There was a higher period up through about from 1981 and probably through about 1987 or so. After that, it is a relatively flat trend, a little variability. It looks like in 2010 with the – I guess they are standard error bars, it actually is increasing in 2008, '09 and '10. I don't know whether you've updated any of that.

MR. CHASE: The DB-SRA model used for projections did include 2011 and 2012 landings data, but the indices of abundance have not been updated since.

MR. GOLDSBOROUGH: Just a real quick one. The red line, Brad, that is the 10 percent reduction; is that right?

MR. CHASE: No; that is just the projection for the median estimate for 2007 to 2010. If we maintain that harvest level –

MR. GOLDSBOROUGH: That harvest level; isn't that harvest level the 10 percent cutback from the current; is that right?

MR. CHASE: No.

MR. GOLDSBOROUGH: From your previous graphs.

MR. CHASE: Would that be the 716?

MR. GOLDSBOROUGH: Seven sixteen is 10 percent?

MR. CHASE: Yes; that would be the 10 percent.

CHAIRMAN STOCKWELL: Audience; any questions?

MR. ALLEN: If I may, I just wanted to have some clarification in the comments about disease related to aquaculture facilities.

CHAIRMAN STOCKWELL: Would you read your name into the record, please.

MR. ALLEN: Yes, Rick Allen from American Eel Farm. In a letter from Kenneth Oliveira; what he stated is that the elimination of transporting eels would reduce the spread of

parasites and disease. The swim bladder parasite that was found in American eels is suspected of having been introduced to Lake Ontario by the transportation of glass eels; not by aquaculture facility.

I would further like to comment on the gentleman – I’m sorry I don’t have your name here, but it seems that you feel as though that the aquaculture may not support a species, and I would like to argue that aquaculture is about a \$50 billion industry around the world. Harvesting seed for a species, there is plenty of scientific data that supports aquaculture around the world. There are many agencies that support aquaculture around the world.

Also, the European market this year has a banner season with over 100 million eels they suspected came into it; and all these eels also come from the Sargasso Sea. There is plenty of data out there. I think it has been 13 years that a comment was made that we should do something with aquaculture, and we should look at these species back in 2000.

There has been plenty of time for studies. To stall for a study to prevent an aquaculture farm from moving ahead I think would be a decision that would not be favorable. It certainly would terminate the opportunity that exists from the table with the American Eel Farm. We would not be able to wait around for a three-year period for some study that there is plenty of information of. You can Google aquaculture and find out plenty of information about it. Thank you for your time.

CHAIRMAN STOCKWELL: Are there any other questions from the audience? Bill you have the last word.

MR. ARCHAMBAULT: Yes, just a quick clarification. We do support aquaculture as an industry. My concerns with aquaculture were in regards to the comment of using a hatchery to buffer or bring back wild populations, but we do support aquaculture as an industry. Thank you.

CHAIRMAN STOCKWELL: Thank you for the clarification. We’re going to take a 15-

minute break and regroup and reconvene at quarter of eleven.

(Whereupon, a recess was taken.)

EXECUTIVE DIRECTOR BEAL: We will go ahead and reconvene the American Eel Management Board. Dr. Daniel, you had a comment before we jump back into it.

DR. DANIEL: Yes, I just wanted to apologize for my bluegill comment. I am sorry; I did not realize we had such a bluegill aficionado crowd. I love bluegills, too, but I won’t ever say another word about a freshwater fish.

EXECUTIVE DIRECTOR BEAL: Thank you for getting us out of that spot, Louis. I thought we were going to have to start a Bluegill FMP. I think all the reports have been given out. As Terry mentioned at the beginning of the meeting, he wanted to be able to participate fully in this portion of the meeting. Tom O’Connell from Maryland is the Vice-Chair of this board and he has the same sentiment. Since given the importance of the yellow eel fishery in Maryland, Tom wanted to be able to participate. I’ve been asked to stand in for the remainder of the meeting.

Where are we? I think we’re at the point of the meeting where we’ve had all the reports; we’ve had all the questions asked and answered as best we could. We’ve had the report out from the working group that had four or five conference calls. The Stock Assessment Subcommittee had three calls, I believe.

We’re at the point where we’re not going to get a whole lot more information the more we ask of working groups or Tech Committees or anybody else. I think we’re pretty close to the limit. It gets to the point where the judgment of the commissioners is probably all that remains, and the group needs to decide how they want to proceed.

#### **DISCUSSION OF MANAGEMENT OPTIONS, RECOMMENDATIONS AND ACTION**

EXECUTIVE DIRECTOR BEAL: With that, I think the best way to craft this conversation is to get a motion up on the board, see what the sentiment of the group is, and then we can proceed through that. We've got Addendum III that has already been out for public comment. We can finalize portions of that. There were also recommendations of the working group to start Addendum IV.

It is sort of a similar spot that the Lobster Board was in yesterday, where they finalized some portions of the management program and then they took additional portions back out for public comment. That is one potential course of action. We've got a little over an hour. We've got a very full schedule this afternoon; meetings scheduled until 6:30 p.m.

I don't think we have the luxury of going too far over the time limit for this board. I think if we get much past noon; I am going to take a quick break and talk with Paul Diodati, the Commission Chair, and Louis as Vice Chair and Terry is the Board Chair, and we'll just huddle up and decide what the best course of action is. But let's see where we can get in the next hour and then we'll decide where to go from there. With that; does anyone have a motion to get us started? Mr. Stockwell.

MR. STOCKWELL: Yes, thank you. Mr. Chair, I really appreciate you sitting in that seat. I listened carefully to everyone's comments this morning; and having participated in the working group, I originally intended to make a motion to approve the working group recommendations and postpone final action until the fall meeting.

To move things along to today; there really are a number of measures that can be approved today, including the habitat and the monitoring issues, the pigmented eel issues, the silver eel and the recreational fishery measures. The tone of this morning's discussion indicates clearly to me that the board needs more time to develop the glass eel measures and consider the yellow eel measures that were recommended by the working group.

It is sort of a backwards way of doing it; but what I want to do is separate the glass eel and

the new measures from this addendum so that we can approve Addendum III in part today. **I am going to make a move to initiate Addendum IV to develop the four new working group recommendations; the potential new glass eel fisheries, the glass eel quota management options, the yellow eel quota management options and the yellow eel limited entry.**

EXECUTIVE DIRECTOR BEAL: Thank you, Terry. We'll get the wording up on the board and perfect that. Is there a second to that motion? Mr. Augustine. All right, are there comments on that motion as that wording gets perfected up there? Terry, do you have any additional comments you would want to provide?

MR. STOCKWELL: We've done a bucket load of work. There are expectations that we get something accomplished today. There is low-hanging fruit I think we can incorporate into Addendum III and take our time to think carefully through the many issues that Brad raised this morning; address some specific measures that will do the right thing for the eels and sustain the fishery.

I don't have the answers today, and I do know at least from Maine's perspective the answer isn't to close a fishery. From the states with the yellow eel fisheries, I suspect they feel the same. I expect this motion to get modified perhaps significantly, but at least it is a start.

EXECUTIVE DIRECTOR BEAL: Other comments on the motion? I think everybody is talked out. Rob O'Reilly.

MR. O'REILLY: I'm just wondering about the quota management. Earlier we heard a little bit about limited entry. That would be something that I would hope there would be more discussion on, because limited entry is a big step. I think quota management might be a big step for some states as there were earlier indications about how difficult it is with each new species that is under a quota.

I would also ask in terms of quota management; is it possible in thinking about what has been

done so far by the working group; that instead of a quota, that there is a cap. We have a situation where the overfished/overfishing aspect is not there. It is a depleted situation coming out of the stock assessment.

There were some ideas I guess from the reports we read that the landings have been increasing. I think really in looking at all the data, probably by 2012; 2012 actually dipped back down coastwide to about where it was in 2010. It was only 2011 which showed an increase up to about 1.2 million pounds, which is very similar to what it was in 2003. I think there might be the possibility, given everything that has been discussed; that this could lend itself to a situation of a cap with a trigger rather than another quota until we have more information.

I think not having anything beyond 2010 for abundance in other parts of stock status makes it a possibility for a cap. You might remember for weakfish it was a great idea to have a cap for weakfish in 2007 with a trigger. It was a coast-wide cap with individual states having a share of what they already had historically with their landings.

The problem with weakfish was weakfish was declining as the cap was set and declined further. I don't sense that with American eel. That is just a suggestion, and I don't know if the working group would be able to look at such a situation as well on the quota.

EXECUTIVE DIRECTOR BEAL: The working group did go round and round and had a lot of conversation on cap versus quota and how those would operate. If the board wants to include options on quotas and on caps; I think the Plan Development Team is going to need specific guidance on what is the difference between a cap and a quota and how a cap with triggers would operate.

If that is the will of the group, I think we're going to need some more guidance for the Plan Development Team as that moves forward. I've got a number of folks here. I think in the interest of time, given that we only have an hour, I'm going to try to limit speakers to one comment per person on each motion.

Then we'll probably even move into the one comment in favor, one comment against motions to move these forward as quickly as possible. If the board feels that is severely cutting off the dialogue that is necessary, let me know, but I think it is a much more efficient way to move through this. We've had a lot of dialogue already this morning. I've got Ritchie then Doug then Louis.

MR. WHITE: I am going to make a motion to substitute. I've struggled with this decision. I am concerned about tying the glass eel and yellow eel issues together. **My motion to substitute is to remove Section 4.1.1 from Addendum III, and task staff to prepare a new addendum to include but not limited to the following:**

Coast-wide quota -- I put in 5,300 pounds, but that is just a starting point for discussion -- 5,300 pounds allocated equally between all the states; adequate monitoring requirements; adequate enforcement measures and penalties; transferability; timely reporting. If I get a second, I would like to speak to it, Mr. Chairman.

EXECUTIVE DIRECTOR BEAL: Is there a second to the motion? Dr. Daniel. Go ahead, Ritchie.

MR. WHITE: The 5,300 pounds comes from the 1999 to 2010 harvest levels. I believe that is the area in which the technical committee has recommended, but that is certainly open for adjustment. We finished a vision statement for the commission yesterday and the ink is barely dry. In that we said a fair allocation of marine fisheries. I think this addresses the fair allocation of this fishery. Thank you.

EXECUTIVE DIRECTOR BEAL: Louis, as seconder, do you have comments on this?

DR. DANIEL: I'll go ahead and make my comments, because it does pertain to this, and then you can cross me off your list. I definitely think we need this addendum in whatever form it takes, because this is new information that we

need to go back to the public on. I support the addendum.

I do think we need to include in there some honoring of our aquaculture commitment from the 2000 plan. I think there are tremendous potential benefits of the aquaculture operations and the opportunities for aquaculture. I would like to see – and this doesn't need to change the motion unless there is a lot of consternation.

But as one of the options in the glass eel fishery, having a provision in there that if we don't have a full-blown, just open every state as a glass eel fishery; if you have a bona fide brick-and-mortar aquaculture facility, to provide some special circumstances to provide them with that competitive edge that they need in order to compete with the Asian markets. I think that is something that we all should be supportive of. That was just an option.

The last comment I would make is – and the reason I seconded this motion is I think it is absolutely critical that we include discussions on the potential ESA listing of this species, and make danged sure that whatever we do, we're not increasing mortality. That is critical, because I think this could stir up a hornets' nest with those folks making the decision on listing. If we go out and say we're just going to have a wholesale open fishery, then we could end up back here in a year or two and we're just implementing the moratorium as required by ESA.

MR. GROUT: Even though Ritchie and I are from the same state, sometimes we do have differing thoughts on things. I will state now that this substitute motion has been put forward; that I do support the substitute motion. I understand where Terry was coming from with this, but I had some concerns with some of the recommendations that came out of the working group.

I also felt within our existing draft addendum we had options for yellow eels that I think we can move forward with here. I am ready to make motions to that effect. Lumping that in with the glass eels; I knew we have differences of opinion on where we should go with glass eels.

I can understand where we might need to have a different addendum to deal specifically with them.

The specific problems that I had with the working group recommendations were some of the recommendations to include the most recent years. They clearly go against what our Stock Assessment Subcommittee recommendations were; that the stock assessment terminal year was 2010. Their recommendations were based on the assessment of the resource at 2010; that we needed to reduce the harvest in all life stages from that point.

Including 2012 in their results in increase in harvest; particularly for including the time series for elvers. It includes it substantially so that we would end up with quotas that were 30 percent, 50 percent higher depending on which averages you have over what was actually being landed in 2010 or some average for that. I think that this board, when we develop whatever plans we have, I think we need to stick to what our stock assessment has recommended; that we're reducing from the point of some average with the last year of data being included in the time series being 2010. That being said I support this motion, and thank you very much for the opportunity to speak.

EXECUTIVE DIRECTOR BEAL: Reading between the lines, I think where folks are around the table; and correct me if I'm wrong, it seems to be an agreement that the board is going to want to start an addendum following this meeting. It sounds like folks want to take some of the pieces of Addendum III and approve those today.

It also sounds like there is going to be a debate on what to include in Addendum IV. I think these two motions, the main motion and the substitute, are starting that debate on what to include in Addendum IV. I think we should vote on these maybe with the understanding that after we tackle all the Addendum III issues, we can come back and flush out the list of items that can be included in Addendum IV rather than debating all the potential options to include in Addendum IV.

Maybe we can make that the last part of the discussion if folks are comfortable with that. In order to do that, I think we should dispense of the motions that are here, vote them up or down and go from there. With that, I had Mitch, then Leroy, Steve and Russ on my list. Some of those names were on from the main motion, but let's try to keep the comments on the substitute motion for now.

MR. FEIGENBAUM: First of all, I support your idea that I think it would be most expeditious if we moved to have some motions addressing the items in Addendum III – what Terry characterized as low-hanging fruit -- and then come back to what the different options should be for the Addendum IV. I think that is the better approach, and I commend you for suggesting it.

I just wanted to comment also very briefly about the aquaculture issue that has sort of come out of nowhere today and dominated an awful lot of the conversation. Under the working group proposals that presumably will be at least considered in Addendum IV, we're talking about the possibility of allowing other states to have some glass eel quota. We're going to debate that. We're going to make a good decision. We're going to have some science and we're going to go back and forth.

Then we're going to decide if other states can get into the glass eel business, and if so, under what conditions. At that point any company that has an eel farm or any other interest in aquaculture or glass eels needs to go to their states and make petitions and lobby their governments and advocate for their position to get a share of that state's quota.

I find in all my experience coming to ASMFC meetings for the better part of the past decade, I've never seen a situation where an individual company would come into the board and say we would like the board to give our company quota. Maybe it has happened; I've just never seen it. I would like to suggest that any further discussion about aquaculture be conducted in the context of whether states should be allowed to expand into the glass eel business. Because if we're going to go the other route, which is individual

companies come in and ask for quota, then most assuredly that has to be done through a proper procedure; not just show up on a day of a meeting and ask for quota. I know there are a lot of folks out there who will be on that line. Thank you.

MR. LEROY YOUNG: One of the things that I'm thinking about relative to a new addendum is to include the idea – and I just throw this out for consideration – but to incentivize improvements in habitat, linking that to any new glass eel fisheries. We do this with all kinds of mitigation, and I think probably all of you do this in your states where, say, there is a development and there is a wetland impact and there has to be mitigation of maybe twice that replacement.

But if we linked that same idea to the glass eel fishery; say a state wanted to take a certain percentage, some kind of take on a stream in their state; to incentivize that by requiring improved habitat of a certain percentage. There is money out there for this. There is a lot of interest, there are grants available. A lot of the states here I think had some success in dam removals and those kinds of things. I think that would be a way to really address this habitat issue in part and link that with this interest in these glass eel fisheries in some of the other states.

MR. TRAIN: I am going to speak in favor of the substitute motion with one exception. I am having trouble with the portion that says of 5,300 pounds allocated equally between all states. I don't believe that is reflective of the current state of the fishery nor the increased effort that would happen with opening a fishery in other states. I don't know if it is appropriate to make an amendment to a substitute motion or not, but if it is I would like to make one.

EXECUTIVE DIRECTOR BEAL: I think you can do that. I think you can go down three levels essentially so you can amend a substitute.

MR. TRAIN: **At this point I move to amend the substitute motion to remove “of 5,300 pounds allocated equally between all states” and leave the remaining text.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that? David Simpson. I've got a list of speakers, but that list was back when the previous motion was up. Let's focus strictly on this motion to amend the substitute, which is striking those half a dozen words or so that take out 5,300 pounds in allocation. Comments on this motion? I've got Bill McElroy.

MR. WILLIAM A. McELROY: I would like to speak in support of that motion. My idea is that to give an equal allocation at this point is certainly doing a disservice to the state of Maine. In my opinion, I don't believe they've done anything wrong by having a fishery that was legal and properly developed. It seems a little harsh to give them one-fifteenth of what they used to have, so I support the motion.

MR. O'REILLY: Yes, I support the idea that this helps everyone come to the idea of what should be equivalency at some point. But at the same time, the 5,300, I'm not sure of the basis for that. I know we can't go a forth level, but I'm not sure why that has to be in there and why it wasn't enough just to have the idea that this could open up the opportunity for other states without setting a specified amount that doesn't seem to track more than the 1998 to 2010 average perhaps is what this was based on. That is a little bit of a sticking point for me, having the 5,300 in there now. It may turn out that with further analysis that would be higher or even lower; I don't know.

MR. ARCHAMBAULT: Again, we would have some serious concern with this motion. I fall back to the technical committee's recommendation that we particularly be conservative with the young of the year fisheries. At this point in time opening up a coast-wide fishery is not what the technical committee is suggesting and could have some serious impacts down the road on future recruitment.

Again, we seem to keep coming back to a couple of good year classes where we've had some good recruitment. But, again, to base that on two good year classes from what we know on fish recruitment is a little bit on the skeptical

side. Again, we would have some serious concerns with expanding this fishery. Thank you.

EXECUTIVE DIRECTOR BEAL: Other comments on this motion to amend? Tom Fote, I haven't heard from you yet.

MR. FOTE: I'm concerned removing the 5,300 pounds out of this. We basically talked about looking at not increasing the harvest. If you take it out, then you are increasing the harvest. Why do we use 2010? That is when the stock assessment period of time is for, and that is what we've used as figures.

The other thing is if we basically keep to a formula we're going through, you've got to do a three-year life study before you can open up any of your glass eel fisheries in any other states. We'll have three years to look at this and we can change the quota right after three years either up or down.

This fishery sometimes is a boom or bust. I remember the long battle we had in New Jersey where they had a glass eel fishery. Basically the year that the bill finally died, the market had dropped off completely, and it was worth \$30.00 a pound, and we were going to charge a thousand dollars for the permit.

We're talking about three years of a life study before you do anything. It basically gives us plenty of time to increase the quota if the current trend stays in place. I feel at this time we can at least put some mark in to basically – you know, we're going for endangered species, people are pushing for that. At least we're saying we're not going to increase the harvest on young of the year, and it won't happen for at least three years, you know what I'm saying, and that is my concern.

MR. ABBOTT: To Bill's comment about increasing the number, I think if people might be interested in not seeing a glass eel fishery, it might sway the Service into making a decision that you would be more likely to advocate. I like the 5,300 pound number simply because the technical committee told us we shouldn't be increasing the number. We initially came here

with the possibility of having a moratorium or having a reduction. I think that starting with this number is a much better idea than not having a number.

MR. MILLER: As I read the proposed amendment, it would strike 5,300 pounds so all that is left then in the substitute motion would be to remove Section 4.1.1, the glass eel fishery from the addendum and task staff to prepare a new addendum. The rest of what follows are things that probably no one would argue about; outlining adequate enforcement, transferability, timely reporting, et cetera. That is all it does. It doesn't do anything with regard to yellow eel. That issue would still have to be dealt with. I just wanted to make sure that I understood what the intent of the amendment and the substitute motion is. Thank you.

EXECUTIVE DIRECTOR BEAL: Well, I think the intent of the motion to amend and the motion to substitute are to limit the scope of the new addendum to the glass eel fishery and handle the yellow eel fishery through Addendum III, and silver eel and recreational would be handled under Addendum III that is in front of the board today. Other comments on the motion to amend? Doug, go ahead.

MR. GROUT: Just a comment from my standpoint. I didn't have a problem with removing the 5,300 because we could determine a different level; but allocated between all states, when you take that part out, it just means there will be a coast-wide glass eel quota. We essentially have that and it doesn't say anything about developing any kind of a fishery, having the opportunity for other states to develop some kind of a fishery in here. For that reason, I oppose the amendment.

MR. ABBOTT: Further reading of Ritchie's motion; 5,300 pounds allocated equally between the states I think gets to Mr. McElroy's issue of thinking that New Hampshire would get one-fifteenth and Rhode Island would get one-fifteenth. I don't think that is the intent of Ritchie's motion. That is what it does say, but I would ask Ritchie White.

EXECUTIVE DIRECTOR BEAL: Ritchie, can you clarify that?

MR. WHITE: Well, that was my intent with thinking that some state directors have already told me that they are not going to have a fishery; so with the transferability piece in there; that obviously some states will have more than one-fifteenth, because a number of states won't be doing it, and therefore probably there will be the ability to transfer that quota to other states.

EXECUTIVE DIRECTOR BEAL: But, Ritchie, under this scenario your initial allocation would be essentially one-fifteenth of the 5,300, and then states would make the decision whether to transfer that or not to other states?

MR. WHITE: That is correct.

MR. SIMPSON: Yes, the reason I seconded the motion is twofold. One is because I think to support your idea for moving forward, less specificity now will help. What you were recommending, which I think makes sense, is the substitute motion says let's set glass eel management aside for the moment.

Let's get back to Addendum III, work out the details; and whatever is left, then we could finish off or perfect the motion to start Addendum IV. That is why I seconded the motion in large part, and also it was just a little more specificity than I think we're ready for right at this particular moment.

MR. ADLER: Yes, this whole thing is just to put that line into an Addendum IV. This isn't a final decision on that; it is to put it into Addendum IV for comment, right or not?

EXECUTIVE DIRECTOR BEAL: Yes, that is correct, absolutely. Dr. Daniel.

DR. DANIEL: That is my understanding, too, and that is why I don't object to the amendment. I would expect that in the fleshed-out amendment or addendum, whatever it is; that it would have various options for reducing harvest in the glass eel fishery consistent with the plan. The one point of clarification I wanted to make though is that I don't know that there is a three-

year study requirement that is sacrosanct at this particular point in time.

I want to make sure I have plenty of opportunity to argue about that because we need to get moving fairly quickly on this. We've got folks that have come through the process and recognized that it is this decision of this commission that is going to make or break their operation. They are holding out, and I think waiting three years is just not reasonable or prudent with the situation that we find ourselves in.

EXECUTIVE DIRECTOR BEAL: Thank you, Louis, and the notion of the three-year survey period is included in the monitoring committee recommendations. It is not part of Addendum III, so that would have to go back out for public comment. Are there any other comments on motion to amend striking those words from the motion to substitute? Yes, Paul.

MR. DIODATI: Just a point of clarification; if the amended motion passes and strikes that language, it doesn't mean that the new addendum won't include as an option setting a 5,300 pound quota to be allocated anyway amongst the states.

EXECUTIVE DIRECTOR BEAL: That is correct; and I think my idea earlier was to move forward with a basic list and the notion that Addendum IV would be developed; and then following the Addendum III discussion, go back and decide if there are other options that should be included. With that, are folks ready to caucus on the motion to amend? All right, I'll read it in; I think it is clear; the very bottom motion.

You are about to vote on the motion that reads move to amend to strike 5,300 pounds allocated equally between all states. All right, it looks like caucuses are wrapping up. Those in favor of motion to amend; please raise your right hand; those in opposition same sign, two in opposition; abstentions; any null votes. **Seeing none; the motion carries. The motion carries 16 to 2.** Now that the change is made to the motion to substitute, are there any other comments on the motion to substitute once that change is made? Russ.

MR. RUSS ALLEN: Thank you Mr. Chairman. I go back to your comments earlier. I think we're just playing with words here. I would have loved to see us work on Addendum III first before we're talking about Addendum IV. I think the yellow eel and glass eel situations are complementary, if not convoluted, and it is really hard.

I can see us easily accepting a nine-inch size limit and a half by half mesh and things of that nature. But the yellow eel quota may make – depending on what we do with that is going to make a big difference in what our thought process is in Addendum IV for glass eels. I'm at this point against the move to substitute. Thank you.

EXECUTIVE DIRECTOR BEAL: Are there any other comments on the motion to substitute?

MR. WHITE: Mr. Chairman, if this passes and we go back and work through issues in Addendum III and find that there are issues that need to be included in this; there is nothing that stops us from adding additional issues to this later in the day.

EXECUTIVE DIRECTOR BEAL: That is correct; the board has the ability to add options and issues to Addendum IV at any time since it hasn't even been drafted yet.

REPRESENTATIVE WALTER KUMIEGA: I think that is why I'm opposed to this substitute motion, because those issues are in the original motion. I don't think we're going to get through yellow eel quota today, so I think that should be part of Addendum IV.

EXECUTIVE DIRECTOR BEAL: Other comments. **Are folks ready to vote on the motion to substitute? I will read the motion in while caucuses are going on just so the record is clear; Move to substitute to remove Section 4.1.1, the glass eel fishery, from Addendum III, and task staff to prepare a new addendum including but not limited to the following:**

**Issue one, coast-wide glass eel quota; Issue two, outline adequate monitoring requirement; Issue three; outline adequate enforcement measures and penalties; Issue four, transferability; Issue five, timely reporting.** Motion by Mr. White; second by Dr. Daniel.

All those in favor of the motion to substitute please raise your right hand; those opposed like sign; any abstentions; null votes? **The motion carries 14 votes in favor; 4 in opposition. Now this becomes our main motion.** Is there any need for discussion? I hope not. All right, seeing no hands, is there a need to caucus? Folks are shaking their head no.

Those in favor of the main motion, please raise your right hand; those opposed like sign; abstentions; null votes. **The motion carries 14 votes in favor; 4 in opposition.** I think that brings us to the point where we're going to start tackling, according to Terry, low hanging fruit, so let's go into Addendum III, tackle some of the issues that are hopefully relatively straightforward and then we'll move back to this addendum if we need to. Mr. Diodati.

MR. DIODATI: I just wanted to respond or comment to remarks made earlier before we get another motion on the table; so while the table is open. It has got to do with the aquaculture discussion that was brought to us today. It is an issue that I am not as familiar with as I should be.

I'm glad that I heard it today, and I think it was appropriate to bring that issue before the board, because I think with this fishery we're facing a very unique situation. In fact, we have significant precedent in federal law that protects American interests in the United States when it comes to allocating quotas.

What those laws do is that it makes sure that quota is allocated first and foremost to American companies. What we have here is a situation where this product is being sold in Asian markets. Certainly, it is probably being sold by American businesses, but the product is entirely exported, and I'm talking about the glass eel fishery.

What we have is a company that has established itself through significant investment, and it cannot survive without the input of glass eel. There has to be some production of glass eels for these companies. If we're going to nurture them, they have to have that. It is not possible for these companies to compete with these Asian markets. All of this product is being exported. I am glad that that issue was brought before me and educated me. I think it is something for us to consider; and whether or not we might want to in this allocation scheme that we're going to talk about in Addendum IV; we might want to consider domestic allocation of a glass eel portion of the quota.

EXECUTIVE DIRECTOR BEAL: That's a good idea, Paul; keep that in mind when we get back to Addendum IV in the list of options. I think it is reasonable.

DR. DANIEL: I just want to say I agree with everything he said.

EXECUTIVE DIRECTOR BEAL: Paul, you've already got support. You are on your way and you don't even have a motion yet. Is there another hand down at that end of the table? All right, motions on Amendment 3; let's jump into those and hopefully we can move through a number of these fairly quickly. Doug.

MR. GROUT: **I have a motion to address the yellow eel fishery under Section 4.1.2. My motion is to adopt Option 2 under Section 4.1.2, increase the minimum size specifically to 9 inches.** Then would you like to take these individually, because I'm going to also offer a gear restriction option.

EXECUTIVE DIRECTOR BEAL: I think we can do that together; they're linked.

MR. GROUT: **Okay; then under Option 3, gear restrictions; I would move adoption of Sub- Option 3B, a three-quarter by one-half inch minimum mesh size. Then under Option 5, I think it is – yes, I would also move adoption of Option 5, reporting requirements that would require states and jurisdictions with commercial yellow eel fisheries to**

**implement trip level ticket systems for dealer and harvest reporting.** That is my motion.

EXECUTIVE DIRECTOR BEAL: Thank you Doug. Is there a second to that motion, as we get it up on the board? Bill McElroy seconds that. There are three distinct portions of the motion. Hopefully, we can keep them together and vote on that as one without a motion to separate the question. Comments on the motion? John.

MR. CLARK: I thought we had been discussing, especially in the working group, half by half as the minimum mesh size and not three-quarter by half. Can we put a motion up to change that to half by half?

EXECUTIVE DIRECTOR BEAL: Let's see if Doug is willing to consider that. If not, we can definitely make a motion to amend.

MR. GROUT: I'm sorry, I didn't hear what the requirement was because I was trying to make sure staff had the correct motion up there. What was the suggestion?

EXECUTIVE DIRECTOR BEAL: John Clark asked the question; the working group was recommending that the gear modification or gear restriction be a mesh of one-half inch by one-half inch rather than the three-quarter by one-half that you had, and we were just checking if you wanted to endorse the working group recommendation or maintain the wording you have on the board.

MR. GROUT: My intent was this particular mesh requirement because it is an option that went out to public hearing. The working group requirement, I hadn't seen any analysis or comments by the technical committee or Stock Assessment Subcommittee as to whether that was an appropriate mesh size to be able to use. I am going to go with this. If the technical committee has a formal report that says one-half by one-half does it, then I am fine with it.

MR. CHASE: The one-half by one-half was most associated with a nine-inch minimum size, whereas the three-quarter by one-half would allow more escapements of 10- and 11-inch eels,

which I think some jurisdictions were uncomfortable with.

MR. GROUT: Okay, then I would be willing to make it one-half by one-half if that is appropriate. I assume having status quo – and is this between status quo and the three-quarter by one-half if we went one-half by one-half?

EXECUTIVE DIRECTOR BEAL: That is the opinion of the working group; that is between those. That was discussed quite a bit on some of the conference calls so they were comfortable with that. Bill McElroy, you seconded that. Are you comfortable with that change? Okay, comments on the motion now. David Simpson.

MR. SIMPSON: Doug, I guess since it is your motion; I'm a little concerned about the reporting requirement trip ticket system sort of thing for eels. It wouldn't fit in our model of dealer reporting, because most of this would not go through a seafood dealer but would go through maybe a bait dealer, and those folks aren't even in our statutes. We would have to work with Inland Fisheries.

They don't have any kind of reporting requirements that all the other species we talk about do. I'm not sure how that will work in practice. I don't know if others have that same issue, but this might be some kid selling eels to the tackle shop. They wouldn't be in our dealer reporting system.

MR. GILMORE: Yes, I have the same concern as Dave brought up. I mean we'd be in the same situation. We don't really have that. We've got a freshwater and a saltwater one we're now putting a burden on.

MR. GROUT: Clearly, this was an option that we approved to go out to public hearing. If those concerns were something that you had at that particular point in time, we probably should have included a different option than this and maybe added a sixth option about reporting requirements. I assumed since this board approved this option for public hearing without any other option for reporting, other than status quo, and we're trying to improve the reporting

system for this; that this would be an appropriate system.

I know for my 99 pounds of eels that we land every year, we could comply with this with our reporting system, because we have both a fishery and then anybody that would sell we would just have to require the dealers to report it to us. That is my motion with this. If you have other ideas that may improve the reporting system, you can make an amendment.

MR. NOWALSKY: The working group recommendation for the Option 5 was tied to if a quota-based management program was implemented. Since we're not at that point yet with this motion, **I'm going to move to amend this to remove Option 5 for trip level reporting requirements.**

EXECUTIVE DIRECTOR BEAL: Is there a second to the motion to remove the reporting requirement segment? Jim Gilmore. All right, so now let's focus our conversation just on the motion to amend, which is to strike that portion of the main motion. Adam.

MR. NOWALSKY: I just want to be clear, Mr. Chairman, as the discussion moves through the day; that is not to remove the reporting requirements entirely. We get to a point where we discuss quota management today or a future addendum; this intent is not to strike it forever.

MR. GROUT: I'm going to speak against this motion because I think one of the things that we oftentimes are looking for if we decide to go to quota management is what have our landings actually been? If we don't start improving our commercial and recreational landings data collection system, it is going to make the determination of what the quota should be a little bit more uncertain.

What I'm trying to do here is to let's get ahead of the curve; let's put in these basic measures that may reduce harvest a slight amount. Then if we decide in the future we have a need for a quota on yellow eels, then we will have good high-quality data to base those quotas on. Have it in place ahead of time; let's not wait until it happens.

MR. O'REILLY: I'm not sure this will help, but on the reporting I guess it depends on how things are reported. If there is not a federal report somewhere under SAFIS, then this would be a pretty daunting task probably for some states right now.

EXECUTIVE DIRECTOR BEAL: Other comments on the motion to amend? Seeing none; is there need to caucus? It doesn't look like it. All those in favor of the motion to amend, please raise your right hand; those opposed like sign. Somehow we gained a vote in that. Somebody voted twice or did something. Somebody is up to something. No; let's try that vote again. Those in favor of the motion to amend, please raise your right hand now and high; all right, now those opposed like sign. **The motion fails on a lack of majority, 9 to 9. The main motion remains as it originally was stated by Mr. Grout.** Mitch.

MR. FEIGENBAUM: Doug, maybe I'm addressing this to you, and perhaps you can address the issue. I don't want to make a friendly amendment, but maybe you can tweak the words. As I recall, the technical committee has said that the half by half mesh; the cutoff what kind of eel the half by half mesh is going to retain goes all the way down to like 8.5 or 8.75 inches if I'm not mistaken.

I think we talked at the working group that if we were trying to accomplish the nine inches by the half by half, we're still going to have this little bit of overlap where some smaller eels are going to come in. Since the group has not endorsed the idea of half by three-quarters, which would have eliminated that problem, the alternative seems to me that there has to be at least some kind of a tolerance in place.

It is a fact; the half by half will still be retaining some eels under 9 inches, and law enforcement has told us repeatedly that they do not want to measure eels. They want to enforce size limits through the gear requirement. It is a little bit of a sticky wicket, but I don't know if there is a precedent for what is an appropriate tolerance. Let me just add that I did think that the half by three-quarters, along with the 9 inches, might

have been the better solution, but I understand that is not the will of the board. Thank you.

MR. O'REILLY: I was just going to ask; I know the working group didn't cover everything, but it goes back to 1998 when we implemented the half inch by half inch, but at the same time there is an escape panel in eel pots of a half inch by one inch; four inches by four inches if it is square or rectangular.

I was wondering if that even came up with the work group or with the subcommittee in any way; and if it could at least get some public comment out there, it might address some of this tolerance issue. It certainly had a pretty good effect for our harvesters.

EXECUTIVE DIRECTOR BEAL: Rob, if I remember right, the working group had a description of everyone's gear requirement, including Virginia's escape panel. But the working group did not spend a lot of time talking about escape panels or the specifics of Virginia's setup.

MR. O'REILLY: May I follow up? Does that mean it might be worthwhile to get some information out there about it and see how this goes? I mean it is good that everyone is going to be at least looking at the half inch by half inch, but the escape panel is probably an important component as well.

EXECUTIVE DIRECTOR BEAL: Are you suggesting potentially including that in Addendum IV for additional comment and not deciding on the gear now or a different course of action?

MR. O'REILLY: I think if I say go to Addendum IV, it probably will not meet with approval here. I'm must wondering if that can be included as a friendly amendment somehow in this motion.

MR. GROUT: Rob, maybe I'm misunderstanding what you're saying; but if you're saying that you want to have the option of adding in a half inch by one inch escape panel, to me that is more conservative than this option that we may be approving; and so that

any state could put that in as more conservative. Are you saying that we do that escape panel instead of the half by half? I'm a little bit confused.

MR. O'REILLY: No, it is in combination, Doug. I guess when you look at the table of what is expected to go to a 9-inch minimum size limit, the savings are rather small. I would think the comments also about you are still going to have eels under 9 inches with the half inch by half inch that Mitchell raised; that is one of the reasons why the escape panel was utilized in Virginia.

It is a four inch square; it is a half inch by one inch. I think it would just add benefit, because there aren't that many states that have significant landings that aren't near the half inch by half inch New Jersey is under right now. There will be some savings there, I would imagine, but in the table it is listed as zero percent savings. The escape panel is just another mechanism that affords conservation, and it would be in combination with the half inch by half inch.

MR. CLARK: I just want to say as a state with a substantial bait eel fishery that we think the 9-inch minimum is adequate and will also allow that fishery to continue. Thanks.

EXECUTIVE DIRECTOR BEAL: Rob, back to your point, Addendum III, when it went out for public comment last time, did not contemplate the use of an escape panel of larger mesh size than the mesh requirement. In other words, the Addendum III language says that if the board changes the mesh size of a pot, then the new mesh size could be used for three years while people convert over.

Like I think Maryland has a three-sixteenths inch mesh size and Maryland could require their fishermen to implement a half inch by half inch panel during that transitional period, but it did not contemplate the use of an escape panel with bigger mesh size to allow the larger eels to escape. If the board wants to do that, I think that would require going back out for public comment for a larger escape panel. Go ahead Rob.

MR. O'REILLY: Well, I think I'll take Doug's advice there that it is more conservative and I hope other states will also heed that advice probably. I don't think it is necessary to go into Addendum IV. I think that is going to be challenging enough, but I think at least everyone is alerted, and I appreciate you looking that up with Kate to get the specifics on it.

MR. NOWALSKY: For those states like New Jersey and New Hampshire, Massachusetts, Rhode Island, Connecticut and Delaware that have a smaller mesh size right now, the working group had contemplated a phase-in period of three years and an escape panel during that three year phase-in period. What would be appropriate, it is my feeling that needs to be in there for our fishermen.

It would be cost prohibitive at this point to expect them to change over all their gear by the implementation date. I don't know whether that would be accepted as a friendly amendment; whether you would want to amend this at the time to include the option specifically to allow a half by half escape panel for a three year phase-in period or whether you would prefer to have that as a subsequent motion.

EXECUTIVE DIRECTOR BEAL: The addendum already includes the language on using a four inch by four inch panel with the new half inch by half inch mesh, but the addendum doesn't specify a timeframe. I think the only additional piece of information we need to provide, Adam, would be the new timeframe since Addendum III does not include that.

As you're saying, there is a financial burden of switching gear right away. Over what time period is it fair for fishermen to be expected to fully change the body of their eel pots to the larger mesh? That would be the question for the board; the timeframe not the use of the panel.

MR. NOWALSKY: I would support the three-year period as per the working group recommendation.

EXECUTIVE DIRECTOR BEAL: Let's do this, Adam; let's handle this motion and then we'll come back to the timeframe in a

subsequent motion if that is okay. All right, any other comments on the motion? Doug.

MR. GROUT: I apologize, Mr. Chairman, but a comment that was made by Mitch gave me pause in that he had indicated that there is going to be some retention of undersized eels with this half by half inch mesh. My original motion until we had the friendly was based on what is in the document. I agreed to amend it after Brad Chase's – the chairman's comment that that wouldn't – that it would be corresponding to a nine-inch minimum size.

I assume that meant that we wouldn't be catching any eels under 9 inches; because that is what I'm trying to do is just make this simple, address the law enforcement concerns. I guess I'd like to have Brad give me – is that the case; are we going to have some eels being retained that are less than 9 inches with a half by half?

MR. CHASE: The theoretical retention size would be 8.75 inches with a half by half, so there would be some. But I think the committees felt that that was probably the best match for 9 inches was half by half. Mitch's comment, the three-quarter would obviously be a better conservation move, but I think it would release some eels in the 10-inch size range, and so there was some concerns about that.

MR. GROUT: Then I guess I would have to ask law enforcement. I have heard there is difficulty in measuring these things. I know there is, because I tried to measure these things when I was a biologist, but you really have to knock these things out. Is the mesh size really the thing that is going to deal with the enforcement? That is the thing you can enforce; can you enforce the 9-inch minimum size? Would there be any discretion that the enforcement would have if they happen to catch somebody with an 8.9 inch eel.

COLONEL JOSEPH FESSENDEN: Well, I was just talking to Marty about this a few minutes ago. The only way we really can do it is having a bucket of ice, which we're not going to have that on patrol. The other way is having a mesh bucket, having a bucket with the mesh

over it and pouring the eels on that bucket and whatever falls through would be illegal.

It would be difficult to enforce. Right now, for example, in Maine we have a six-inch minimum size. We don't have to worry about measuring a six-inch eel. To me I would have the mesh size so small that there would be no way of catching that minimum size eel that you want. Do you understand that; do you get that? Maybe kind of figure that out. My recommendation would be to do that.

EXECUTIVE DIRECTOR BEAL: Marty, do you have a comment as well?

MR. BOUW: Yes, it also depends on when the eels are caught and how long they've been in the pots. If they've been in the pots for five days, yes, they've lost the weight. They shrink up. But if they've been just caught the day before, they have their belly's full, they will not come through that mesh. As me being responsible hauling 80 percent of those eels, I don't want to be picked up by him and slapped in handcuffs because I've got 10 eels in my truck that are undersized. It is very hard what prospect it is.

EXECUTIVE DIRECTOR BEAL: Doug, do you have a follow up or a way out of the woods maybe?

MR. GROUT: I don't know if a way out of the woods, but would you be more comfortable with – the advisory panel person as a harvester be more comfortable with a half inch by three-quarter mesh size?

EXECUTIVE DIRECTOR BEAL: Marty, do you have a comment?

MR. BOUW: It would make it more feasible, but it is a lot of cost to the fisherman, and I believe the pots are not done in three years. If you asked those fisherman that have 2 and 3,000 pots to change those pots over in three years, it is not going to happen. They wouldn't put the money into it. The market is not there for it and they would not put the money into it. In all fairness, you maybe should put in a tolerance of about 10 percent. That is being fair if you go with half by half.

EXECUTIVE DIRECTOR BEAL: All right, other comments. Jim Estes.

MR. JIM ESTES: If we implement a half inch by half inch escape panel, do we need to even mention anything about the size limit; because we're essentially doing that anyways and it seemed like that would take care of the problem.

EXECUTIVE DIRECTOR BEAL: That is another option. Pat Augustine.

MR. AUGUSTINE: I would suggest we go to a tolerance, and we've heard it from Joe and from Marty both, and you end up with a 10 percent tolerance. Is that high, Marty? You picked 10 percent out and here they mentioned a 1 percent tolerance in another part. Would 5 percent be more adequate? I don't want to split hairs, but let that create an enforcement issue when you're using half by half, if that is the way we go. What would you suggest?

MR. BOUW: I'm just taking them by myself. Looking at what you see, what we pick up, I think 10 percent is a high mark, but it at least keeps everybody safe. That stops the patrol splitting hairs, because that is where the problem is going to come. That is intolerance that the people that have fished that the day before; they still put them on the truck. They are not going to keep those eels separate for another five or six days.

EXECUTIVE DIRECTOR BEAL: All right, a couple ideas bouncing around, getting rid of the size limit, a tolerance. What do folks want to do? Doug.

MR. GROUT: Well, personally, I think having a tolerance makes enforcement much more complicated. It would just be much more simple if we are going to be effectively managing by a minimum mesh size to eliminate the minimum size limit from that. I would be willing to remove that part from my motion if the seconder is willing to agree, and just go by half inch by half inch.

I also, just to get out ahead of what may come up as a follow-up motion from some of these

discussions, if we want to have a phase-in period, I certainly can understand the need for that. Hopefully, other states will also have the escape panels in there. If it is okay with the seconder, Mr. McElroy, can we remove the minimum size limit option so we're just going to say remove for Option 2, increasing the minimum size limit to 9 inches.

EXECUTIVE DIRECTOR BEAL: Let me check with the board. There has been a lot of discussion and a lot of debate on the 9-inch portion of this motion. Is anyone at the board not comfortable with pulling out the 9-inch minimum size; and if they are, we'll have to do this through a motion to amend. I do see some hands up. Dr. Daniel, do you have a comment?

DR. DANIEL: I would support it if that is going to give me my elver fishery. I'm assuming that is what that would do.

EXECUTIVE DIRECTOR BEAL: If you can keep them in a half inch by half inch pot, I think you're all set.

DR. DANIEL: It doesn't say that; it just says no size limit.

EXECUTIVE DIRECTOR BEAL: All right, is there a motion relative to the size limit issue?

MR. FOTE: I support putting a half inch by half inch in the commercial fishery and make that the requirement without a size limit, but again you're dealing with the recreational fishery, and you really need to keep a 9-inch size limit in the recreational fishery. We can all handle this differently. You have a gear modification that allows them only to catch a certain amount, but in the recreational fishery you should still have a 9-inch size limit.

MR. DIODATI: I think maybe there is a technical committee – some input on this. I guess the concern might be that if it is not in there, then this leads to the possible development of fisheries that are targeting eels below 9 inches, 6 inches, 7 inches, 8 inches and that becomes problematic. I think it belongs in there, but I would like the technical committee to say something about it.

MR. CHASE: Well, the technical committee and the SAS were looking for opportunities to reduce mortality in all fisheries, and we felt the size limit was one area to do that. We targeted sizes 10, 11, 12 inches that would lead to some small reductions in mortality. Through the negotiating processes we came back to 9 inches.

I think there is still a benefit there even though it is a slight benefit. The second benefit is the concern over development of new markets for those eels that are above glass eel size, the pigmented eels 5, 6, 7 inches that could be harvested. There is some evidence there are markets for those. That change would also reduce that incentive to have those new markets develop, which I think is important.

MR. AUGUSTINE: Based on the discussion, **I would like to move to amend to add a 5 percent tolerance for enforcement purposes.** I'm not sure what language you want to use, but to add a 5 percent tolerance. If this is going to reduce the amount of infractions, it makes sense, and Marty who has been in the business for 30 years or more knows this is going to happen with a half by half inch net.

Yet half by three-quarters is not going to cut it for us and 9 inches is the size we're trying to get to. I agree with Tom Fote, if somehow we can have a statement in here later when we get back to Amendment 3, that we add a minimum of 9 inches on the recreational side for retention purposes. We've got to have that control, because I know with those commercial fishermen – I mean, the charterboat folks, too; been there done that. I do think we have to close that loop. If we're going to try to reduce mortality, let's do it in a logical way that is going to make sense and is doable. Thank you.

EXECUTIVE DIRECTOR BEAL: Is there a second to the motion for a 5 percent tolerance? Steve Train; thank you. Pat, is this 5 percent tolerance by number of eels or by weight? I'm hearing number is a better way to go.

MR. AUGUSTINE: Is enforcement going to look at them visually or they're just going to

say, yes, it looks like 5 percent. It is going to be visual, right?

COLONEL FESSENDEN: We're not going to have a scale so that makes it difficult with the weight. Marty is telling me weigh it here. No, we wouldn't have a scale with us and so number would be –

MR. AUGUSTINE: It would be just a look-see visual probably, my guess would be.

COLONEL FESSENDEN: It is easier to count them up.

MR. AUGUSTINE: That is the way we would have to do it, Bob. I don't know how we can handle it.

EXECUTIVE DIRECTOR BEAL: Pat is saying by number. Any comments on the 5 percent tolerance in minimum size limit by number? Louis.

DR. DANIEL: I'm sorry; I'm trying to make sure my head is wrapped around this properly, and I'm talking back here at the table. We're kind of confused about what does this do? You laugh, but the glass eel fishery, if there is a 5 percent tolerance, then that 5 percent could be glass eels, right? I don't believe this motion, if it is directed to the pot fishery only. But it says bycatch in the yellow. You could have a silver eel in there too, right? That is not illegal.

I'm just a little bit concerned about how this works. If it is an intent to move forward with an addendum or an amendment to address the glass eel fishery, I think this might muddy it up a little bit. If I'm alone on this concern, I will get over it, but I just want to make sure the board is clear and we're clear, the record is clear of the intent here and not have somebody take advantage of it in some way, shape or form.

EXECUTIVE DIRECTOR BEAL: I think this is for, as was said, the yellow eel fishery, and the enforcement folks would look at – and, Joe, correct me if I'm wrong – would look at the fact that the eels are retained by one-half by one-half inch mesh, but they happen to be somewhat smaller than 9 inches. They would still have to

be retained by that mesh. If they fall through that mesh, then they would be illegal anyway. Is that right, Joe? Joe indicated yes. I think that helps with the elver issue. We've got a number of hands. Rob O'Reilly.

MR. O'REILLY: Yes, I just don't think this is necessary. I appreciate that it may help somewhere, but usually in a state law enforcement has discretion of some amount. They know where the problems are and they are going to find them, and I don't think complicating it with a tolerance is really the right thing to do. I did want to comment on the other motion, but I'll wait until my turn comes up.

EXECUTIVE DIRECTOR BEAL: Other comments on this 5 percent tolerance motion?

MR. ABBOTT: I'd like to oppose this motion also. Though I would enjoy watching Joe Fessenden count 500 eels looking for 5 percent tolerance, and I would more enjoy asking for a recount, and then I would further enjoy being in court when the judge asked you about your count and asked you at that point to make another count.

I think that we should leave this to the law enforcement people to either feel that they have enough of a problem to make a case or not. If there is no tolerance, then they make a case as they choose. I just don't think this is necessary nor should we be getting so wrapped around the axle to do this. I appreciate your motion, Pat, but I just don't think it is really necessary or serves a good purpose, but I would enjoy watching Joe count eels.

EXECUTIVE DIRECTOR BEAL: Steve Train as a seconder.

MR. TRAIN: Dennis, I had the same visual when I seconded it. I seconded this not so much for the 5 percent but to make sure the 9 inches stays in. I have a fear as a trap fisherman in another fishery that if you do not maintain a minimum size you; for lack of a better word, encourage the piracy of the undersized eels. Somebody will find a way to set a trap that will catch them and they will catch a lot of them.

I think Paul touched on that. You need to keep a minimum size in there not because of the trap requirements you are putting in are going to have too many of them, but because somebody will find a way around that and they will find a way to land the smaller ones. I thought the 5 percent might be a good balance. If we don't need it, we don't need it, but I would hate to see the minimum size leave.

EXECUTIVE DIRECTOR BEAL: Other comments on the 5 percent tolerance? Seeing none; is there need to caucus? It doesn't look like it. Those in favor of the motion to amend, which reads motion to amend to add 5 percent tolerance to a minimum size limit by number, please raise your right hand, those in favor; those in opposition same sign; any abstentions or null votes, one null vote. **Motion fails; 4 votes in favor; 13 votes in opposition, and 1 null vote.**

I just looked at my watch. It is a little after noon, and the low-hanging fruit thing is not going real well. I think that brings us back to the main motion, which includes all the provisions from earlier. Are folks ready to vote on the main motion or is there anything else that needs to be discussed?

I don't see anything else; good. Need to caucus? Seeing none; those in favor of the main motion, please raise your right hand; those opposed; abstentions; null votes. That one carries unanimously. We have cleaned the slate. We have no motions on the board right now. Are there other motions on Addendum III? Yes, Adam.

MR. NOWALSKY: Would now, Mr. Chairman, be appropriate for the motion? **I would move to have a three-year phase-in period for the minimum mesh size, during which time a four-inch square half by half inch mesh escape panel could be utilized.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that motion? Jim Gilmore, thank you. Comments on the three-year phase in. Terry.

MR. STOCKWELL: I would just like some rationale Adam. That's an awful long time.

MR. NOWALSKY: We have fishermen in our state with a lot of gear where quite frankly to ask them in a one- or two-year time period, the financial expense of asking them to do it would probably drive them right out of the fishery.

MR. FOTE: Yes, we're not talking about a glass eel fishery where you're making \$230 a pound and we're not talking about a lobster fishery where you get good prices. This is a lot different fishery, and to make them go through the expense of exchanging 2,000 pots or 300 pots, it takes a bit of time, because these guys are basically just watermen and bay men that make a combine income basically crabbing, clamming and potting for eels, so that is what I'm looking at.

EXECUTIVE DIRECTOR BEAL: Also, the three years was recommended by the advisory panel and the working group. Ritchie, do you have a comment?

MR. WHITE: Yes, not knowing anything about an eel pot, what about location of that escape panel; does it make any difference?

MR. NOWALSKY: Well, obviously if the pot sets on the bottom, it is going to be an issue. At some point in time that pot does need to be raised vertically, which would present an opportunity for those eels at that time. Basically, when the pot is going to go down, though, a lot of the pots are weighted on one direction. However, there would be the possibility that they could go down with that on one of those sides.

MR. WHITE: I would like to ask the technical committee then if they would have a recommendation, if there should be a location or an area that the escape panel should not be located.

MR. CHASE: I would defer to the industry. I would think with those comments you would not want it to be on the bottom on one side; maybe on both sides midway up, but I defer to others.

MR. FOTE: In my younger days, when I actually fished, I used to fish a lot of eels and put a lot of eels and kept them in pens. You get a quarter-inch hole in the pen and they seem to get all out. I lost more eels from a small hole. There is no problem of them; as you pull them up you see them getting out of the pot if there is a hole big enough to get them out.

You are basically pulling them; they'll get out no matter what. You've got to understand the fishery and the fishery is as soon as you start lifting that pot, they are looking for some place to get out. Eels are very good about getting out of anything.

EXECUTIVE DIRECTOR BEAL: North Carolina and Virginia currently require escape panels. Does either of those state have details in your laws that could be borrowed by other states or is it not specific on where the panel should be?

MR. O'REILLY: If I may; what I was trying to explain to Doug earlier, if the pot itself is a half inch by half inch mesh; and then within the pot, if it is square or rectangular, it has one four-inch by four-inch escape panel, a half inch by an inch. That also works for cylindrical eel pots; you still have to have the four-inch square. It is not dedicated to the placement as such, but it is dedicated to the idea of that.

MR. NOWALSKY: From a reality perspective, it is going to be in a fisherman's best interest where it is going to work. Otherwise, it is going to result in a high likelihood of an enforcement violation. With no tolerance built in, the fisherman is likely to do everything in his power to make sure it is effective.

EXECUTIVE DIRECTOR BEAL: Any other comments on this three year phase-in idea? Seeing none; need to caucus? No; looks good. I'll read it into the record: move to have a three-year phase-in period for the minimum mesh size in which a four-inch square one-half inch by one-half inch mesh escape panel could be utilized.

All those in favor, raise your right hand, please, 16 in favor; opposed; like sign; abstentions; null

votes. **The motion carries 16 votes in favor, 1 in opposition and 1 null vote.** Are there any other motions on Addendum III; the silver eel portion or recreational fisheries? Doug.

MR. GROUT: **I'm going to try and hit another low-hanging fruit here and go directly over to the recreational section, and move to adopt under Section 4.2, recreational fisheries, Options 2, the 25 fish per day angler creel limit; and Option 3, the exemption for party/charterboats.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that motion? Bill Adler, thank you. Comments on the motion for recreational management provisions? Yes, Walter.

REPRESENTATIVE KUMIEGA: Does that address the 9-inch minimum, or how is that addressed?

EXECUTIVE DIRECTOR BEAL: Doug did not include that in the motion. Doug.

MR. GROUT: To be honest, I didn't see under recreational measures something that went out to public hearing with a minimum size limit for recreational; or am I incorrect on that?

EXECUTIVE DIRECTOR BEAL: Kate, can you comment on that?

MS. TAYLOR: There is text in the document that says that there would be need for consistent size regulations between the commercial and recreational fisheries.

EXECUTIVE DIRECTOR BEAL: I think based on that wording, the board has the ability to include a minimum size for the recreational fishery. Doug.

MR. GROUT: My motion didn't include that; but if somebody wants to make an amendment, that is fine. I just find it kind of difficult to see how you could enforce a minimum size limit with recreational fisheries.

EXECUTIVE DIRECTOR BEAL: Let's see if folks want to either amend this motion or

dispose of this one and then have a subsequent motion. Yes, David Simpson.

MR. SIMPSON: Yes, I'm a little trouble by the exemption for party and charterboats. I thought when we talked about this last time there was a decent understanding that this was a possession versus take issue. I don't think party and charterboats are out there catching eels. They are buying them and bringing them out with them. To provide an exemption here I think is just not necessary and can be dealt with in how the take versus possession rule is applied.

EXECUTIVE DIRECTOR BEAL: I think under Option 3; actually, Kate, it is probably better if she clarifies.

MS. TAYLOR: Option 3 just allows for the party and charterboats to maintain the current regulation that they are subject to under the FMP while the recreational fishermen would be subject to the 25-fish bag limit.

MR. SIMPSON: Right; so different rules for party and charterboats than everyone else on eels. **I'm going to move to amend to strike the Option 3, an exemption for party and charterboats.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that motion? Stephen Train. All right, so now let's focus on that motion to amend, which removes the exemption for party and charter boats. Rick.

MR. RICK BELLAVANCE: I guess I recall it a little bit different, and maybe I could defer to Joe in regards to the enforcement part of this. I thought we had that discussion and there was no way to differentiate between harvest and possession, so that is why we went forward with the charterboat exemption for those folks that might be transiting areas with a large quantity of eels to pick up customers somewhere else. I think there was an enforcement issue there, but maybe you can clarify that, Joe.

COLONEL FESSENDEN: Yes, I agree that there should be a possession limit. I don't think we ought to get into proving take. It should be a strict possession limit. That is the easiest thing

to enforce. We can enforce anything; but if you look at the success, we'd have a much higher success rate with possession.

MR. FEIGENBAUM: Well, I don't know how you could include an exemption for party charterboats and not one for commercial bait shops, because it is the exact same scenario. They are going to be possessing; they need more even in the boat to possess more than 25 at a time. If we don't take out the partyboat exemption, we need to add a bait shop exemption.

EXECUTIVE DIRECTOR BEAL: Well, I think the bait shops are covered. Once they purchase those eels, they are allowed to possess more than 25. It is not an individual recreational fisherman at that point; similar to a commercial dealer or anyone else possessing one.

MR. FEIGENBAUM: I don't see – I don't get it, okay.

MR. FOTE: There are 5,000 beach buggy permits for Allen Beach State Park. One guy will ride 50 miles to pick up eels for five or six people. He's picking up maybe 150 to 200 eels. He's got to have the purchase slip in his hand. If he gets stopped by law enforcement without that purchase slip, then he's in trouble. But probably now with gas prices and everything else, people look to pool their resources and this is what it's doing, because we went out and burned a lot of gas sending six people to pick up 25 eels when one guy can go pick up 150 eels for the six guys. That is what this accommodates; and as long as you have a proof of purchase, whether it is a partyboat or a charterboat or a private boat or a beach buggy, you are covered.

EXECUTIVE DIRECTOR BEAL: Other comments on the motion to amend by striking Option 3. Seeing no other comments; are folks ready to vote? Need to caucus? I will read the motion: move to amend to strike Option 3, an exemption for party and charterboats. All those in favor of the motion to amend, please raise your right hand; those opposed to the motion to amend please raise your right hand; abstentions; any null votes? **Motion fails; 4 votes in favor, 12 in opposition.**

Now we're back to the main motion. The wording of the main motion stays intact and there are no changes based on the motion to amend. Any comments on the main motion? Mitch.

MR. FEIGENBAUM: Well, there is still this issue on the table about unifying the recreational size limit and the commercial size limit. I heard Commissioner Grout suggest that if someone wanted to make that motion to do so, he wasn't going to make it. **I would like to make a motion that the size limit for recreational catch be uniform with the size limit for commercial catch, as has always been the case I believe in our fishery and was the recommendation I do believe of the working group.**

EXECUTIVE DIRECTOR BEAL: **Mitch, that would be a motion to amend to add that to the main motion?**

MR. FEIGENBAUM: Yes.

EXECUTIVE DIRECTOR BEAL: All right, is there a second to the motion? Pat Augustine, thank you. Comments on the motion to amend, which would add a minimum size limit of 9 inches for the recreational fishery? Any comments? People are getting hungry and worn out, so we make some progress. Is there need to caucus? Mitch.

MR. FEIGENBAUM: Well, I'll just make the brief comment again if we think that raising the size limit is the right thing to do and we want to have consistent enforcement, I don't understand why we would have two separate size limits. Again, it has always been the case. The recreational size limit has been six and the commercial has been six. This would be a departure to not accept the motion.

EXECUTIVE DIRECTOR BEAL: I'll read the motion in while the states caucus: move to amend that the size limit for the recreational fishery matches the size limit for the commercial fishery. Those in favor of the motion to amend, please raise your right hand; any votes in opposition; abstentions; null votes. **The motion carries unanimously.**

That wording will be added to the main motion. Is there any need to discuss the main motion anymore? It doesn't look like it. All right, caucus on the main motion. I'll read the main motion here in a minute, once it is squared away. **The main motion reads move to adopt under Section 4.2 recreational fisheries Option 2, 25 fish per day creel limit; and Option 3, an exemption for party and charterboats; and the size limit for the recreational fishery matches the size limit for the commercial fishery.** Is there a need to comment? Doesn't look like it; caucus? States in favor of the main motion, please raise your right hand; any votes in opposition; abstentions; null votes. **Seeing none; the motion carries unanimously.** Yes, sir, Pat.

MR. AUGUSTINE: **Mr. Chairman, move to approve Addendum III management options as amended today for final approval.**

EXECUTIVE DIRECTOR BEAL: Let me check if there are motions on the silver eel fishery before that. That is one of the issues that folks indicated they wanted to talk about. Are there motions regarding the silver eel fishery? Doug.

MR. GROUT: For the purposes of discussion for this board, I think we do need to discuss this, **so I'm going to make a motion for Section 4.1.3, silver eels fisheries, adopt Option 2, seasonal closure restrictions.**

EXECUTIVE DIRECTOR BEAL: Kate has one question, Doug, on that motion before I ask for a second, if that is okay.

MS. TAYLOR: I just wanted to clarify that you're looking to approve the language that was included in the public comment document and not the working group recommendations.

MR. GROUT: Correct.

EXECUTIVE DIRECTOR BEAL: Is there a second to that motion? Bill McElroy, thank you. Comments on the motion, which was; Option 2, seasonal closure for the silver eel fishery. Jim.

MR. GILMORE: You're killing me, Doug. This motion essentially would shut down the New York Weir Fishery in the Delaware, which was the recommendation that maybe there be essentially an exemption for that. If that was not included in what you were doing, **I will have to move to amend that we essentially adopt Section 4.13, for the silver fisheries adopt Option 2, season closure but exempt the Delaware Weir Fishery in New York.**

EXECUTIVE DIRECTOR BEAL: Is there a second to Jim's motion to exempt the Delaware River Weir Fishery in New York? Paul Diodati.

MR. DIODATI: Actually, I thought that the working group spoke about an exemption to allow spearfishing in that time period of September to December, and that accommodates some long-standing practices from some of the Native American groups in Massachusetts. I would like to see that in place. If we can put that in there as well, I will second the motion, I would be glad to.

MR. GILMORE: I'll gladly take that.

EXECUTIVE DIRECTOR BEAL: Sounds like a deal, Paul, so we'll get that in there. We'll add the exemption for spearfishing gear; and then that will be a motion by Jim Gilmore, seconded by Paul Diodati. Comments on the motion to amend? Ritchie.

MR. WHITE: Jim, I support this amendment. I guess my only concern is that it stays a minor fishery. I don't know if there is a way of you putting in some poundage or some sidebars or something such that this couldn't end up being a large fishery at some point and it would be exempted.

EXECUTIVE DIRECTOR BEAL: Jim, do you have a comment on that or do you want to hear what other folks have to say first?

MR. GILMORE: I wouldn't have an objection for doing that Ritchie. I don't know what that limit would be. I mean, we could base it on the historic landings and keep it at that, but we would have to develop that.

MR. ARCHAMBAULT: It would be helpful if New York could give us some idea on the size and the magnitude of this fishery. These are by far the most important eels we are trying to protect, so I'm trying to get a handle on what we're looking at for the size of this fishery.

MR. GILMORE: I don't have the exact numbers, but I think that in its heyday there were about 12 or 15 permits, and I think it is down to 3 to 6. It is very, very small. I think the poundage is –I don't remember exactly what it is. Again, I would have to get those numbers, but it is a small fishery, and we could again base it on its current size so it wouldn't expand. Again, it was relatively small both in poundage and number of fishermen that were exploiting it.

MR. YOUNG: My question is how would this reduce mortality on silver eels? I don't understand how it would do that. I mean, is there a significant fishery in other states in that seasonal period? What is this actually doing?

EXECUTIVE DIRECTOR BEAL: We'll get back to that, Leroy. Mitch.

MR. FEIGENBAUM: Yes, first I would like to address Leroy's question very briefly, and that is that there are a very few remaining pound nets along the coast that are potentially retaining silver eels. This would prohibit the keep of those eels. Nonetheless, the Delaware River Weir Fishery is clearly by far the largest and only really significant silver eel fishery in the U.S.

Keeping it at a status quo would pretty much mean silver eel harvesting is kept at its status quo. But at this point I would just like to point out to my fellow commissioners that Mari-Beth DeLucia is here. She is the Vice-Chairman of the AP. She sat in on every working group meeting and every AP meeting on this issue. She knows an awful lot about it, and if the Chair would indulge us if she could have a minute or two just to address this, because she really brings a lot of good information to the table.

EXECUTIVE DIRECTOR BEAL: Mari-Beth, if you could come up, that would be great if you could just kind of characterize the fishery and

address some of the concerns about this fishery expanding, and what changes you would expect if this motion were to pass.

MS. MARI-BETH DELUCI: The fishery is definitely variable. It has been, as you said, up to six, but up to 12 fisheries. It is the only inland fishery, so it is taking all large female silver eels. I think that is what most people are concerned about. I've personally spoken with multiple fishermen on this, and some years one eel weir has taken up to 11,000 fish out of one of the only rivers on the east coast that is not dammed, and it has some of the highest water quality. These are probably very healthy female silver eels.

At the last meeting we were at, there were some new young folks that wanted to get into this fishery because of prices that were increasing. I spoke to a DEC. fishery biologist 10 years ago who was intimately familiar with this fishery and he said, "Oh, in 10 years it will be gone." Well, it is two more years and the fishery actually seems to be getting more increase in pressure.

I work on the Neversink River in particular. Last year we had three more people that just wanted to start fishing these fish. It's not declining. It goes up and down with the years. It is taking all females. I think the working group came up with some reasonable recommendations that would protect some of the cultural aspects of this fishery for the next ten years, but not allow it to expand or grow and start reducing it down, and I think to decrease new fishermen from coming in.

EXECUTIVE DIRECTOR BEAL: Thank you Mari-Beth; sorry to put you on the spot like that.

MS, DELUCIA: Yes, thank you, Mitch.

EXECUTIVE DIRECTOR BEAL: Yes, thank Mitch and not me.

MR. FEIGENBAUM: Very briefly; 11 pounds nets, 110,000 eel – or 10,000 or 11,000 pounds per net would equal a silver eel fishery that could reach as much as 100,000 pounds a year. A hundred thousand pounds a year of silver eels

would probably be the conservation equivalency of the entire glass eel fishery in North America. Brad would probably have a better idea of the numbers than me, but I'm quite sure I'm not too far off.

MR. FOTE: That PBS special on eels, is this the one that basically almost blocks off the whole river; and basically everything that goes down, it takes everything coming out, all the eels basically for that two-month period? That to me is a problem. If you're basically removing every silver eel that is coming down a river – when I looked at this on television, it was amazing how much area, and it was really a funnel that stopped everything coming down for a two-month period. I've got concerns with this.

EXECUTIVE DIRECTOR BEAL: Jim, do you have a comment?

MR. GILMORE: Yes, first off going to Mitch's comment, I think we were down to six permits. I think there were only three nets fishing. Again, this is a real boom-or-bust fishery. It is heavily dependent upon atmospheric conditions in terms of rainfall, whatever, and essentially they get nothing some years.

The average is more like they are taking 1,000 to 3,000 on a good year. Those are more realistic numbers. Trying to say that this is equivalent to the glass eel fishery; that is just not right. Again, this is a small fishery. We're trying to maintain that historic and that classical existence of this fishery in inland waters.

If we want to limit this down or even suggest that we could go with try to phase this out in 10 years; but to totally eliminate this at this point in time, I think is incorrect. We would be willing very much to try to reduce it down to some reasonable number that the board feels comfortable with.

EXECUTIVE DIRECTOR BEAL: Well, it sounds like folks want to take a reduction, but they're not sure exactly what they are working with as far as poundage or number of gears.

MR. STOCKWELL: For all the tender loving care the elver fishery got this morning, I've got

great concerns about the silver eel fishery. I've got a motion to substitute the working group's recommendation. It addresses the issue –

EXECUTIVE DIRECTOR BEAL: Terry, hang on. We've got a motion to amend, so are you substituting the motion to amend?

MR. STOCKWELL: I guess I'm waiting for lunch, too. I guess we vote this one up or down, but this doesn't do it for me. The working group spent a fair amount of time talking about this. I think the resolution might be in that recommendation.

EXECUTIVE DIRECTOR BEAL: Thank you Terry. Mitch, and then we're going to get ready to vote.

MR. FEIGENBAUM: I want to be clear to the good folks in New York that I do not support the working group's recommendation to phase it out completely in 10 years. I don't think it should be phased out ever, but I do think that there needs to be some reduction. Really these two options are leaving us or all or nothing, and it is precluding the middle.

Maybe we can come back to it after lunch and come up with the appropriate measures, which is the middle ground. There should be some reduction or cap in that fishery just like every other fishery is being asked to make a reduction or a cap. I'm sure we could work that out. I asked Mari-Beth to speak. That doesn't mean I agree with everything she said. I do not support a closure to shut it down. I was involved 10 years ago saying this is a little fishery and we shouldn't even be bothering with it, but now I feel we should do at least something.

MR. DIODATI: Yes, it is getting a little bit confusing as to what this amendment would achieve. I'm debating whether or not I want to try to separate out my change to allow spearfishing with it. If the amended motion fails, does that prevent me from bringing back the allowance for spearfishing?

EXECUTIVE DIRECTOR BEAL: In the interest of time, I'll say no. I think it is fair. If this motion were to fail and it is a motion to

amend, you could bring back one portion of that motion in a subsequent motion. It sounds like Mr. Stockwell indicated that he may ask for consideration of the working group recommendations, which include the exemption for spearfishing.

MR. DIODATI: I guess it's not clear to me what the scope of this fishery is that we're debating, this particular weir fishery in New York. That seems to be the real issue. Until we understand the scope of that fishery, I know I am going to have trouble supporting a motion which I seconded.

MR. GROUT: Based on the considerable discussion that we've had over this, I have a suggestion here. Clearly, because we're down to an amendment, I would recommend that we vote this up or down, this motion to amend. Then at that point potentially have a substitute motion that we would address the silver eel fishery in Addendum IV.

Then we can try and work out some of these details in Addendum IV at that particular point rather than try and deal with it today. I don't know how the rest of the board feels about it, but given the amount of discussion I think it is something that would be appropriate for Addendum IV.

EXECUTIVE DIRECTOR BEAL: Does anyone have a concern with that suggestion? We'll vote on this motion to amend and see where it goes from there. All right seeing none; is there a need for caucus? **I'll read the motion into the record: move to amend for Section 4.1.3 for silver eel fisheries, to adopt Option 2, season closure; but exempt the Delaware River Weir Fishery in New York; and to allow for spearfishing gear.**

The motion is by Mr. Gilmore, seconded by Mr. Diodati. All those in favor of this motion, please raise your right hand; those opposed like sign; abstention; null votes. **Two votes in favor, 15 votes in opposition, the motion fails.** That brings us back to the main motion, and is there any interest to have a substitute as was suggested earlier? Doug.

MR. GROUT: Could I make a substitute motion to my own motion or should I get somebody else to do it?

EXECUTIVE DIRECTOR BEAL: It is probably better to have someone else do it. Mr. Stockwell.

MR. STOCKWELL: I've been very successful today so we'll see how this goes. **I move to amend or substitute, but it would be to move further consideration of silver eel fisheries into Addendum IV.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that? Jim is seconding it. Dr. Daniel.

DR. DANIEL: I think we could do that. I would prefer though to take action for this upcoming – would we be able to action for this upcoming season if we did something today? That is my concern, is that we're talking about trying to make concessions in the fishery and we're trying to do some things with Addendum IV, but I don't know that we've really done a whole lot to reduce harvest in this amendment. With the ESA looming, it would probably be in our best interest to do a little more other than punting again.

EXECUTIVE DIRECTOR BEAL: Louis, the closure that is contemplated here would be September through December. Are you suggesting have something in place for this September or are you talking 2014?

DR. DANIEL: Well, I guess my question – to simplify my question is by delaying this into Addendum IV, do we lose any protection of the silver eels that are so important to bluegills.

EXECUTIVE DIRECTOR BEAL: I guess that depends on whether the states could have implemented a closure this fall or not. That is a question for the board. Other comments on that? Mitch.

MR. FEIGENBAUM: Yes, I'll let Jim correct me if I'm wrong, but I suspect that the silver eel fishermen on the Delaware are putting their weirs in at this time. It is basically a late summer construction project to set up the fishery

for the fall. I was going to say why don't we table this until after lunch, because I think we could resolve it? But in fairness to the fact that the fishermen are already in the water and it is probably impractical to implement anything until 2014, I would therefore support the motion, because we can get Addendum IV done in time for 2014 either way.

EXECUTIVE DIRECTOR BEAL: I don't think though that we have the luxury of doing this after lunch. I think we need to wrap this up and then get on to the other board meetings we have this afternoon.

MR. FEIGENBAUM: I support the motion.

MR. O'REILLY: I agree with what Louis indicated about making more progress, and the only thing that was a hang-up for me on the New York situation was that in the working group it talked about effort reduction. Given that there are so few permits, I don't really know what that would entail.

But I think if there had been language in that substitute motion that had said provisions will be described by the technical committee for some type of compensation, then that would have been enough for me, but that wasn't there. New York has had a couple of good years the last two years; but even with a couple of good years of all the eel landings, it is about 3 percent of the total.

I know how much of that is silver eel, but I think the big problem is – and Paul talked about it – we really don't know how large this is, so some things to find out, but I would like to see us do something on silver eels today if possible. Some states might be able to implement it fairly quickly; others won't, but it certainly would be better than delaying.

MR. RUSS ALLEN: Just to follow up on that, if we delay silver eel regulations today and we push that all the way back into Addendum IV, which probably gets through in February, we'll never have that in place by September 1st. We do have a couple fishermen who do catch silver eels in fyke nets. We won't have that in place for next year at all. I see that as a 2015 thing. I

would rather see that get done right now if possible, also.

EXECUTIVE DIRECTOR BEAL: All right, other comments; folks that haven't commented on where to go with silver eels. We've got a substitute motion to defer this issue to Addendum IV. Is there any other comment on that? Are folks ready to vote on that substitute motion? Seeing none; I'll read it into the record while the states caucus.

**Move to substitute for further consideration of silver eel fisheries into Addendum IV. Motion by Mr. Stockwell; second by Mr. Gilmore.** Those in favor of this motion, please raise your right hand; those in opposition like sign; abstentions; any null votes? **The motion fails; 8 votes in favor, 10 votes in opposition.** We're back to the main motion, which is Option 2, seasonal closure as presented in Addendum III. Leroy.

MR. YOUNG: What will this mean to the silver eel fishery? Is there going to be reduction in harvest or is this just status quo?

MS. TAYLOR: This would prohibit these fisheries from occurring.

MR. FEIGENBAUM: **I would like to make a motion to amend the primary motion to include an exemption for spearing** and to include a one-year exemption for the state of New York, which would then give us an opportunity to address Jim's concerns, which I do think is fair, as opposed to going to the silver eel fishermen in Delaware who may have been spending the last two weeks building a weir and telling them you're not allowed to fish this year, take it out, no warning, no notice.

EXECUTIVE DIRECTOR BEAL: The motion by Mitch is to exempt spearfishing gear and to exempt New York for the 2014 fishery. Paul Diodati is seconding that. Mitch, is that specific to the New York Delaware River Weir fishermen?

MR. FEIGENBAUM: Yes. I don't know of any others.

EXECUTIVE DIRECTOR BEAL: Okay, Paul, you're okay with that? Okay, Paul indicates yes. Any discussion on this motion to amend the main motion? Adam.

MR. NOWALSKY: Just to be clear, Mr. Chairman, I heard you say exempt it for the 2014 fishery. The motion was for a one-year exemption, which I would assume would be from the implementation date that we still have to determine. In all likelihood, they're going to be the same, but just for clarity sake I heard you say something different than what is up there right now.

EXECUTIVE DIRECTOR BEAL: That's a fair comment, Adam. I think, Mitch, the intention was the first year that the closure would be required of all states; New York would be exempted from that closure.

MR. FEIGENBAUM: No, actually the intention was that New York would be exempted from the closure if it were to apply to 2013, this year.

MR. NOWALSKY: Well, if that is the case, I would suggest that we won't know that until we vote on an implementation date; and in all likelihood, I am going out on a limb here that the implementation date is probably not going to be this fall for this.

MR. FEIGENBAUM: Fair point; you have a lot more experience than I do in how these things go. I just want to get a result. How we get to the result I will leave it to the smarter guys than me.

EXECUTIVE DIRECTOR BEAL: Are folks comfortable with taking up a New York exemption until we talk about the implementation date of Addendum III, should we ever get to that point?

MR. FEIGENBAUM: Yes, if everyone would agree, I would just change the amendment to only include the spearing, and then we can talk about New York when we talk about implementation dates.

EXECUTIVE DIRECTOR BEAL: Paul, are you comfortable with that change, just doing the

spearfishing? All right, it just deals with spearfishing. Leroy.

MR. YOUNG: Just a quick question for clarification; what is this spear fishery all about? How many fish do they take; what is that about?

EXECUTIVE DIRECTOR BEAL: Paul, can you give some insight on this fishery?

MR. DIODATI: I think I am going to ask Dan to help with that.

EXECUTIVE DIRECTOR BEAL: Dan, the local spearfishing expert.

MR. DAN MCKIERNAN: No, we actually don't have any estimates except that was the most substantive comment we got at the public hearing from the local native tribe that they just wanted that gear to be exempted. If they are taking eels during the fall, that is a technique that they use, so this proposal was designed to prevent the harvest of exiting eels in the water column. Obviously, we thought it's the weir fishery that should be targeted, and this is simply another technique come in the fall that they will take eels one at a time. We just didn't want to make it a blanket prohibition.

MR. FEIGENBAUM: Yes, and in fact most of those speared eels would not be silver eels, because you spear dormant eels that are lying down for the winter. Of course, we know that a mature silver eel is migrated at that point.

EXECUTIVE DIRECTOR BEAL: Do we need to caucus on the motion to amend for the spear fishing exemption? Seeing none; all those in favor of the spearfishing exemption, please raise your right hand; those in opposition; abstentions, one abstention, Rhode Island; any null votes? Seeing none; **the motion carries 15 votes in favor, none in opposition, and one abstention from Rhode Island.** That language will be included in the main motion.

Is there anymore discussion on the main motion, Option 2, with the spearfishing exemption? Seeing none; I'll read that into the records while the states caucus: move for Section 4.1.3 for silver eel fisheries, adopt Option 2, seasonal

closure, with the exemption of spearfishing. All those in favor of this motion, please raise your right hand, **18 votes in favor, and that is all the votes we have, so the motion carries unanimously.**

Is there anything else on Addendum III? Kate, was it the pigmented eels; was there a motion needed on that? That is the only other issue that someone contemplated including in this discussion. I don't know if anyone has a motion on that based on the recommendation of the working group or anything else. Mitch.

MR. FEIGENBAUM: I would like to move that the harvest of any American eel under the auspices of a glass eel fishery – let me rephrase that. I move that the harvesting of fingerlings or pigmented eels beyond year one be banned. I think the better way of making this motion is to say I would like to incorporate the working group language. Sorry about that; I am getting tongue-tied. **I move that we adopt the working group recommendations on the prohibition of the take of fingerlings; otherwise known as a pigmented eel tolerance.**

EXECUTIVE DIRECTOR BEAL: Kate, could you provide that language from the working group?

MS. TAYLOR: The recommendations of the working group are the pigmented eel tolerance and any restrictions prohibition on the harvest of this life stage. This could be accomplished with the use of an eighth inch non-stretchable mesh and potentially with a 1 percent tolerance by count.

EXECUTIVE DIRECTOR BEAL: We'll get that wording in there, but is there a second to this provision? Terry Stockwell, thank you. Is there any need to discuss this issue on the harvest of pigmented eels and the one-eighth inch stretch mesh to determine what is a pigmented eel?

MR. GROUT: I just need to have a clarification of whether this working group recommendation is significantly different from Option 5. Do we need to go out to public hearing on this?

MS. TAYLOR: Under the pigmented tolerance language that was included in the document that went out for public comment, it just says that there would be a small tolerance, a maximum of 24 pigmented eels per pound of glass eel catch of pigmented eels would be allowed, and that states would have the option to propose other restrictions such as the mesh size to meet the goal of minimizing the development of this pigmented eel fishery. The working group recommendation, instead of saying this 25 glass eel tolerance, is just saying that they are applying this restriction and potentially through the use of this eighth inch non-stretchable mesh.

MR. GROUT: You feel that this isn't sufficiently outside of the draft public hearing document that would warrant needing to go back out to public hearing?

EXECUTIVE DIRECTOR BEAL: I think it was more of a clarification on what would be determined to be a pigmented eel. I think the notion of the tolerance obviously went out for public comment. It doesn't seem too far afield from what was included. Other comments on this motion.

Seeing none; I'll read it into the record while the states caucus: move to adopt the working group recommendation on Option 5, pigmented eel tolerance. All those in favor of the motion, please raise your right hand; all votes in opposition; abstentions; null votes. **The motion carries unanimously.** I think that brings us through all the issues that were contemplated in Addendum III that the board wanted to tackle today. Bill.

MR. ARCHAMBAULT: Just a quick clarification Mr. Chairman; will the habitat recommendations be adopted; are they already part of Addendum III when we vote to move this?

EXECUTIVE DIRECTOR BEAL: I think that was the intent. Is there any objection to approving the habitat recommendations as part of Addendum III once this moves forward; and the monitoring requirements? Seeing none; then it will be part of the package. Is there a motion

to approve the addendum and include an implementation date with consideration of what we discussed earlier for New York's Weir Fishery? Yes, Doug.

MR. GROUT: **Yes, I would like to move approval of Addendum III as modified today with an implementation date of January 1, 2014.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that? Bill McElroy, thank you. A need to talk about this? Jim.

MR. GILMORE: Just so I understand this now; I need the one-year exemption, whatever, to get through this; but then now that we've taken the silver eel fishery out of Addendum IV, I don't know how to get it back in here. Just as a question; if I add it on and essentially amend this to consider the New York Weir Fishery in Addendum IV as a stand-alone item under the silver fishery; is that the way to handle this? I'll make that amendment if that is the way to do this. I can't come up with a better way of how we're going to address this, because a one-year extension or whatever, even getting through this year, doesn't fix the longer-term problem.

EXECUTIVE DIRECTOR BEAL: You have that option of making that motion to amend if you would like unless anyone else has a suggestion.

MR. GROUT: Well, we can go back and look at the substitute motion that was defeated, but I would say if we adopted this motion and you could make another motion to include just your fishery – consideration of your fishery in Addendum IV. Because, the other motion I think had your fishery and the spear fishery.

We were trying to put everything considering silver eels into Addendum IV; not just a specific part. That is the way I would look at it is to do it. After we approve the Addendum here, then make a motion to include consideration of your fishery in Addendum IV.

EXECUTIVE DIRECTOR BEAL: All right, Jim, are you comfortable with that approach of making a subsequent motion after this, because that is the next step in this process, as painful as

it may be, is going back to the list of issues that are going to be included in Addendum IV.

MR. GILMORE: Mr. Chairman, could we bring, if Mari-Beth is still around; I just want to make sure that works. She understands the fishery a lot better than I do. Could we just bring her up for a comment on that? I think I'm okay with it, but I would like to hear from her.

EXECUTIVE DIRECTOR BEAL: Mari-Beth can we put you on the spot one more time?

MS. DELUCIA: If I got you right, this year we would be exempt. Mitch is right, the fishermen are actually building their weirs right now. We would discuss other options in Addendum IV. I think that would work. The fishery is from August to November 1<sup>st</sup>; that's it. It is a very short fishery. Does that work?

EXECUTIVE DIRECTOR BEAL: Jim, it sounds like inclusion in Addendum IV might work for New York.

MR. GILMORE: I'm sorry, Mr. Chairman, say that again.

EXECUTIVE DIRECTOR BEAL: Based on Mari-Beth's comments, it sounds like inclusion of this issue in Addendum IV might work for New York since the implementation date is not until 2014.

MR. GILMORE: Yes. The question to you; do you think we would be able to – in terms of Addendum IV, we would be able to have this in place by the 2014 season, because that would be the only limitation we would be facing. If we can, then essentially we would want to try to have an exemption for a full year from January 1st.

EXECUTIVE DIRECTOR BEAL: Yes, Jim, I think the intention is to bring Draft Addendum IV back to this board either in October or in February and final approval in May at the latest.

MR. O'REILLY: I was just wondering; Option 2 under silver eels passed, and the language that exempted New York was withdrawn from that substitute motion; but Option 2 is there; correct?

EXECUTIVE DIRECTOR BEAL: Yes, Option 2 is in place right now, which is the fall closure.

MR. O'REILLY: January 1 is the implementation of that. Is that, Jim, what you're looking towards, that there would be the ability before that next season starts in 2014 that Addendum IV is in place?

MR. GILMORE: Correct; we essentially want to maintain the 2013 and the 2014 harvest in the weir fishery, and by then for the following years we'll have a permanent solution to what we're going to do with that fishery.

MR. NOWALSKY: Mr. Chairman, I would hate to see us feel the need to – clearly, we all want to do something with glass eels, so Addendum IV is clearly going to be a priority. I would hate to see it not get done correctly because of the rush to do something for New York for 2014 for their weir fishery. **I think we would be better served today, and I'll make a motion to amend to include an exemption to the implementation date for the 2014 New York Weir Fishery.**

EXECUTIVE DIRECTOR BEAL: Is there a second to that motion? Dr. Rhodes, thank you. Okay, let's focus on the motion to amend, which would give the New York, Delaware River weir fishermen a pass for 2014 fishery for that one year. Any other comments? .

DR. DANIEL: I'm trying to find Option 2 in here to see exactly what it says. I thought it was a seasonal, like a two-week closure; right?

DR. MALCOLM RHODES: No, it is a four-month closure.

EXECUTIVE DIRECTOR BEAL: Are you all set, Louis?

MR. NOWALSKY: The motion on the board doesn't reflect one year, I don't believe, and it should reflect that. As it states right now, it just states it is a general exemption, but that exemption would only be for one year. Again, I believe the intention of New York is to make a

motion to include more discussion about this in Addendum IV.

EXECUTIVE DIRECTOR BEAL: Any other need to talk about the motion to amend? Seeing none; I'll read into the record while the states caucus: move to amend to include a one-year exemption for the implementation date of the New York Delaware River Silver Eel Weir Fishery.

All those in favor of this motion, please raise your right hand; those in opposition; abstentions, one abstention from New Hampshire; any null votes? **Seeing none; the motion carries 15 votes in favor, 2 in opposition and one abstention. That will be added to the main motion.** The main motion will now approve Addendum III as modified with the implementation date of January 1, and it will have a one-year exemption for the New York Delaware River fishery.

Is there any need to talk about that motion? Seeing none; all those in favor of the main motion please raise your right hand; those opposed to the main motion; abstentions, two abstentions, both federal services; any null votes? **Seeing none; the motion carries, 15 votes in favor, 1 in opposition with 2 abstentions.** That brings us to the portion of the meeting where we are going to talk, hopefully quickly, about the issues included in Addendum IV. Jim, do you have your hand up?

MR. GILMORE: I am going to make a motion, but I don't know if you want it now or do you want to have some discussion.

EXECUTIVE DIRECTOR BEAL: Motions are good; now is always good.

MR. GILMORE: **Okay, I would move to add to Addendum IV consideration for a limited weir fishery for the Delaware River in New York.**

EXECUTIVE DIRECTOR BEAL: Before I ask for a second, I just wanted to make sure the record is clear that North Carolina was the one state in opposition to that, so we have a full record of how our folks voted on that. Is there a

second to the motion that Jim Gilmore made? Adam Nowalsky, thank you.

We'll get that motion up on the board. Comments on including New York Weir Fishery in Addendum IV. Jim, the working group in the original addendum had a number of options in that. Are you looking for additional options to be included in Addendum IV? Is that something we should work with you on?

MR. GILMORE: Not that I am aware of at this time. Those options were fine; it just needed to be discussed a little bit more, because some of them were a little bit confusing, particularly the monitoring requirements. We can discuss that through the addendum.

EXECUTIVE DIRECTOR BEAL: Jim, essentially we'll just take the Addendum III wording and put that in IV and have some more discussion. You will have the opportunity to talk more at home on that.

MR. GILMORE: Yes, that sounds good.

EXECUTIVE DIRECTOR BEAL: All right, great. Any other comments on this motion? Any opposition to including this issue in Addendum IV? **Seeing no opposition; motion carries.** Any other issues? Mr. Stockwell.

MR. STOCKWELL: Mr. Chairman, given the grave importance of this elver fishery to the state of Maine and before we do it anymore injustice, could you lay out the process that you envision that we're going to move ahead with this addendum? We've been here for five hours and I hate to see people making motions on the fly that we might have to chase their tails on later.

EXECUTIVE DIRECTOR BEAL: Yes, I don't know if we have a course set. You folks did pass the first motion of the morning that included some of the provisions that would be included, including transferability and quotas and monitoring and a number of other things. There are a couple of ways to tackle this, and I know folks are tired.

One is the board could give some guidance to the working group, and we can reconvene that

group and have them come up with some of the suite of options. I think a lot of folks liked some of the ideas that the working group has already included, and we can start with that as the basis for that discussion if the board is comfortable with that. If there are other approaches, I think we should talk about it now. The working group had a pretty wide representation up and down the coast, and different interests. That may be a starting point but it is up to the group. Yes, Terry.

MR. STOCKWELL: Mr. Chairman, I think given the many comments we had around the table on the quality of the work that the working group did, I think it might be helpful for whether it is the technical committee or the PDT to review those recommendations and then to repopulate the working group with a little broader board representation. I would particularly like to have New Hampshire on the working group.

EXECUTIVE DIRECTOR BEAL: Doug, you had your hand up and you've been nominated.

MR. GROUT: Maybe I'll delegate it to Ritchie. He's not here, right? I guess my personal preference – and I guess this is going to mean we're going to have to go to the board – is that I think we should take working group recommendations along with the crux of that motion and give it to the PDT and technical committee and let them come up with something and then bring it back at the October meeting. I think we've had a working group; we have a motion from the board. That is the basis and let the PDT bring it together. That is their role.

EXECUTIVE DIRECTOR BEAL: Are folks comfortable with having the PDT charged with drafting Addendum IV; and the glass eel section, the basis for that will be the recommendation from the working group that has already been received by the board. Does anyone have a problem with that; let me put it the other way.

#### **PLAN DEVELOPMENT TEAM**

All right seeing none; Kate tells me that the Plan Development Team will have to be repopulated to some degree. We don't have to do it now, but we're going to reach out to the states and ask for

some additional horsepower to draft this document. The timeline will be bringing this back – yes, Doug.

**MR. GROUT: I nominate Ritchie White for the PDT.**

EXECUTIVE DIRECTOR BEAL: The last time he ever goes to lunch early, huh? We'll reach out to the states and get a few folks to help Kate out with drafting the document. The intention will be to bring that back at the annual meeting in October. Is everybody comfortable with that? Kate and I are chatting offline here.

The first motion that was passed by the board essentially captures the main themes of the working group recommendation. That again will serve as the basis for the PDT effort. Okay, beyond the glass eel fishery, two other issues came up. One is aquaculture that Louis and Paul mentioned earlier about the notion of potentially considering a domestic allocation for the glass eel fishery.

Are folks comfortable with the PDT exploring that and including some language, and you guys can take it or leave it at the annual meeting? No opposition there. Okay, we mentioned earlier to include the ESA listing or potential ESA listing as part of the background of the document, and we will include that. Yes, Dave.

MR. SIMPSON: Yes, the point about domestic fishery, I completely agree that was a great example of why we want to consider broader opportunity for a glass eel fishery and the idea of domestic aquaculture is a great idea, but some of that discussion made me very anxious about individual companies getting quota.

All of that stuff opens up a can of worms in my mind. These are all domestic fisheries. This isn't TALF or anything; these are all domestic fisheries, and it starts to get you in a discussion about what a fisherman may do with his product; may he sell them overseas, may he not sell them overseas? I think as a reason to move forward with this addendum it is great; but getting into specifics and set-asides and so forth, I think takes us down a path we don't want to go.

EXECUTIVE DIRECTOR BEAL: Thanks, David, and I guess international issues and trade issues and those sorts of things get the state department involved and a bunch of other things potentially. We can wrestle with that a little bit as part of the Plan Development Team.

DR. DANIEL: I think Dave makes a good point. I think though it could be allocated to a state and then allocate that; then states would be responsible for determining whether it is a legitimate brick-and-mortar aquaculture operation. I think there are ways that we can address those concerns and move forward with this.

EXECUTIVE DIRECTOR BEAL: The other notion that was out here is the transfer of yellow eel quota into glass eel fishery and that conversion factor. If the board wants to go down that road, the first step there is obviously setting up yellow eel quotas for the states, and the board chose not to do that today. Should those options be considered and that potential conversion factor explored by the Tech Committee and Stock Assessment Subcommittee as part of this document or not? Tom.

MR. FOTE: Bob, I feel uncomfortable with us sitting five and a half hours at a meeting to start doing things really fast. We're all tired and we've all been going through – some of us are supposed to eat every couple of hours and we've been sitting here for a long time. I am really thinking that we should basically wrap this up before we start going any further.

MR. STOCKWELL: To your point, Mr. Chairman, that was one of the working group recommendations; and when the PDT and the technical committee reviews it, I think it will either rise or fall on its own merit.

EXECUTIVE DIRECTOR BEAL: Great, it is fair game for them to consider it, I guess is the best way to put it. That will be explore potential for yellow eel quotas. Is there anything else, anything at all? I think we're all set.

## ADJOURNMENT

I don't see anything else coming before the Eel Board under other business. Kate, is there anything else we need to do? PDT has adequate direction. You'll hear from us asking for members. Let's break for lunch.

(Whereupon, the meeting was adjourned at 1:20 o'clock p.m., August 7, 2013.)