

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

**Crowne Plaza Hotel Old Town
Alexandria, Virginia
August 9, 2012**

Approved October 2012

TABLE OF CONTENTS

Call to Order, Chairman Terry Stockwell1

Approval of Agenda.....1

Approval of Proceedings, May 20121

Proposed American Eel Endangered Species and CITES Petition.....1

Public Comment2

Technical Committee Report on Potential Management Options2

Discussion of Potential Management Options for American Eel.....4

Other Business12

Adjournment.....12

INDEX OF MOTIONS

1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of May 1, 2012** by Consent (Page 1).
3. **Move to accept the technical committee's report and recommendations as presented** (Page 10). Motion by Pat Augustine; second by Bill Adler.
4. Motion Reworded (Page 10): **Motion to prepare an addendum that has the goal of furthering eel conservation that includes the range of options suggested by the technical committee; including possible moratoria on glass and silver eel harvest, reductions in yellow eel catch and effort, seasonal closures and future monitoring requirements.** Motion made by Pat Augustine and seconded by Dr. Jaime Geiger. Motion carried (Page 13).
5. **Adjournment by Consent** (Page 13).

ATTENDANCE

Board Members

Patrick Keliher, ME (AA)
Terry Stockwell, ME, Administrative proxy
Steve Train, ME (GA)
Doug Grout, NH (AA)
G. Ritchie White, NH (GA)
Paul Diodati, MA (AA)
William Adler, MA (GA)
Jocelyn Cary, MA, proxy for Rep. S. Peake (LA)
Robert Ballou, RI (AA)
Rep. Peter Martin, RI (LA)
Bill McElroy, RI (GA)
David Simpson, CT (AA)
Lance Stewart, CT (GA)
James Gilmore, NY (AA)
Pat Augustine, NY (GA)
Brian Culhane, NY, proxy for Sen. Johnson (LA)
Russ Allen, NJ, proxy for D. Chanda (AA)
Tom Fote, NJ (GA)
Adam Nowalsky, NJ, proxy for Asm. Albano (LA)

Leroy Young, PA, proxy for J. Arway (AA)
Mitch Feigenbaum, PA, proxy for Rep. Vereb (LA)
Roy Miller, DE (GA)
David Saveikis, DE (AA)
John Clark, DE, Administrative proxy
Bernie Pankowski, DE, proxy for Sen. Venables (LA)
Russell Dize, MD proxy for Sen. R. Colburn (LA)
Thomas O'Connell, MD (AA)
Bill Goldsborough, MD (GA)
Kyle Schick, VA, proxy for Sen. Stuart (LA)
Cathy Davenport, VA (GA)
Ross Self, SC, proxy for R Boyles, Jr., (LA)
Spud Woodward, GA (AA)
Aaron Podey, FL (AA)
Derek Orner, NMFS
Jaime Geiger, USFWS
Dan Ryan, DC FW
A.C. Carpenter, PRFC

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

Ex-Officio Members

Brad Chase, Technical Committee Chair

Joe Fessenden, Law Enforcement Committee Rep.

Staff

Robert Beal
Toni Kerns

Genny Nesslage
Kate Taylor

Guests

Wilson Laney, USFWS
Jim Armstrong, MAFMC
Lewis Gillingham, VMRC
Rosemarie Grom, USFWS
Sharon Lynn, USFWS
Kate Morrison, Sargasso Sea Alliance
Sean McKeon, NCFA
Rob O'Reilly, VA DMR

Bob Ross, NMFS
Peter Burns, NMFS
Jack McGovern, NOAA
Joe Grist, VMRC
Deborah Faulkner, NRDC
John Whiteside, Sustainable Fisheries Assn.
Scott Ault, Kleinschmidt Assoc

The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel, Alexandria, Virginia, August 9, 2012, and was called to order at 9:30 o'clock a.m. by Chairman Terry Stockwell.

CALL TO ORDER

CHAIRMAN TERRY STOCKWELL: Good morning, everyone. Welcome to the Eel Board. I'm Terry Stockwell, the Chair of the Board. I would like to approve the agenda with two modifications; one of which is we're going to move Kate's update on the proposed eel endangered species and CITES petitions up ahead of the technical committee report.

APPROVAL OF AGENDA

CHAIRMAN STOCKWELL: The other is we have some AP nominations. Is that all right with everyone? Okay, without objection, the agenda is approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN STOCKWELL: The proceedings of the May 5th board meeting; any changes, additions or edits? Seeing none, without objection the proceedings are approved. I'll turn it over to Kate and then we'll move right along.

PROPOSED AMERICAN EEL ENDANGERED SPECIES AND CITES PETITION

MS. KATE TAYLOR: As the board is aware, in April the U.S. Fish and Wildlife announced that American eel is being considered for listing on CITES Appendix II. This was a recommendation from the Species Survival Network and WWF due to concern for look-alike cases with European eels and the potential for increased demand for the American eel as a replacement species in international trade for the European eel.

ASMFC did provide comments on this not in support of going forward with Appendix II listing. The decision is expected to be published in early November. Additionally, as the board is aware, American eel has been petitioned by the Council for Endangered Species Act Reliability to list American eel on the ESA.

At this point U.S. Fish and Wildlife staff and funds have not been allocated for an American eel status

review. Just so the board is aware, a species must be listed on the ESA if it is threatened or endangered due to any of the following five factors: the present or threatened destruction, modification, curtailment of habitat or range; the overutilization for commercial, recreational, scientific or educational purposes; for disease or predation; for other natural or manmade factors affecting the continued existence of the species; or for the inadequacies of existing management.

CHAIRMAN STOCKWELL: Thank you, Kate. Are there any questions for Kate? Bill.

MR. WILLIAM A. ADLER: Kate, once again here, where in this process is the ESA listing proposal? I don't want to get into sturgeon again here. Where are we?

MS. TAYLOR: U.S. Fish and Wildlife did publish the positive 90-day finding, which stated that the information contained in the initial petition warranted further consideration; so the next step is the development of a status review. The Fish and Wildlife staff have informed me that funds and staff have not been allocated yet to conduct that status review.

DR. JAIME GEIGER: Mr. Chairman, I just would request the commission – again, Kate put those issues that we use to look at ESA determinations. Again, anything this commission could do to promote conservation of American eels is a very positive thing. That includes supporting CITES. I would urge this commission again to continue to do everything possible within your individual and collective jurisdictions to again conserve American eel populations. That also includes a strong support of CITES. I would urge again that if we not done that, I would respectfully request that we reconsider that. Thank you.

MR. JOHN CLARK: Jaime, are you recommending that recommend to CITES that American eel be listed as a managed species that way?

DR. GEIGER: I would urge this board that I think any positive action that we can take to promote conservation of American eel populations would be beneficial. Again, you see how an agency determines how one lists the species under the ESA. This commission has a very good, solid history of being proactive and being very aggressive in management and conservation of all the fish species under its jurisdiction. Again, I would respectfully request that I think that would be a very positive thing to do.

PUBLIC COMMENT

CHAIRMAN STOCKWELL: Other comments or questions? Seeing none, before I turn it over to Brad, I omitted to ask if there is any public comment for items that are not on the agenda. Is there anyone from the public who like to speak? Seeing none, it is all yours, Brad.

TECHNICAL COMMITTEE REPORT ON POTENTIAL MANAGEMENT OPTIONS

MR. BRAD CHASE: Just to recap, the Eel Technical Committee and Stock Assessment Subcommittee produced a benchmark stock assessment for eel this year. It was presented to a Peer Review Panel and approved. We reported on the stock assessment to the board in May, and the board requested the technical committee to produce recommendations on reducing fishing mortality for eel.

We met about two weeks in Baltimore and we had a good session. We came up with a series of recommendations I'm going to present for you now. The feeling was to look at eel at all major life stages, glass eel, yellow eel and silver eel and come up with recommendations to look at reducing mortality at each life stage and also look at non-fishery approaches, habitat improvements, different ways to reduce mortality and to spread this across the different ways the eels can be caught and killed.

Once again, we focused on these three life stages primarily, glass eel, yellow eel and silver eel. We spoke about recreational fisheries, monitoring habitat and law enforcement. Glass eel fisheries probably received the most attention. You're probably all aware of the increase in these fisheries the last two seasons. We spent a fair amount of time discussing this fishery.

The assessment did not identify a relationship strictly that links glass eel recruitment to later life stages, and this is really a problem with the species. We have a single stock. Eels are panmictic (single stock) and semelparous (spawn once and die). It is a difficult relationship to establish. It doesn't mean it is not there; it's just the stock assessment did not identify it. The technical committee, however, recommended a precautionary approach.

Given the fact the stock assessment has a depleted status, we wanted to look at this closely and try to come up with some recommendations for our reducing mortality in the fishery. There was discussion on the poaching that has been occurring

the past two years in the fishery. It really took off in 2011 and 2012.

I think the phrase "out of control" came up several times in the discussion from several jurisdictions. There is a lot of concern over the amount of poaching that has occurred. The fishery occurs in Maine and South Carolina. There are only ten permits in South Carolina and there are I think approximately 400 permits in Maine.

Eels can be readily caught in coastal rivers in the springtime and so there was activity in neighboring states to Maine and other states on the east coast resulting in a lot of poaching. The concern is this could affect future recruitment in these states that don't have fisheries. The technical committee feels this has to be addressed.

We broke apart our recommendations into two categories; one to directly address fishing effort and mortality, and the other is to have management measures on existing fishery regulations and to look to avoid expansions of future markets. The two categories to reduce mortality are effect reductions in existing fisheries and a coast-wide closure.

Again, with the number of permits in South Carolina, there is only ten; in Maine you a greater number of permits. The discussion looked at caps on permits or actual reductions in numbers of permits. The coast-wide closure received attention because it is the obvious way to really address the poaching problem that is greatly increasing. It would make it very difficult to poach.

These eels are all exported to Asian markets, and it would make it very difficult to take these eels if there were no fisheries. In terms of management measures, there is no quota presently. There is no quota in South Carolina or Maine, so we discussed having a coast-wide quota, and the board could give us advice on how they want us to approach developing a coast-wide quota.

There was also concern on the expansion of a fishery to young pigmented eels. These eels arrive as glass eels. That is what the market favors and that's what I think the fisheries have traditionally targeted. These eels quickly become pigmented and we're starting to see interest in targeting these pigmented eels.

Most states have a minimum size of six inches, and so there could be growth in these pigmented eels in the markets to target these and lead to an expansion of these fisheries. We would like to find ways to prevent that from happening. There were also allegations of many new dealers coming into the

fishery and some having unscrupulous behaviors. There probably needs to be some attention paid towards new dealers entering the fishery.

Moving on to the yellow eel fisheries, these fisheries mostly target eels with pots and primarily provide eels for the bait market but also for food markets as well. There is presently a minimum size in not all jurisdictions but most at six inches. With the previous stock assessment, we looked at the concept of changing our minimum/maximum size for eels.

We conducted a model and looked at eggs per recruit, and we found that you'd have to have pretty large changes to your present sizes to have large gains in eggs per recruit. This time around we looked at the concept again, and we realized that we have a mandate we believe to reduce mortality and so small changes would be beneficial and to spread these changes across the different fisheries and different life stages would make sense.

We did look at the concept of increasing that minimum size from the six inches to an eight-to-twelve inch range. What that might do is have a modest gain in egg per recruit. It would also prevent the expansion of that new fishery on these pigmented eels. We put that to the board to consider an increase in minimum size.

We also discussed having a maximum size. These eels exit as larger silver eels on their way to spawn at sea. Presently there are very few fisheries that target silver eels, but you do see these fisheries target eels that are getting close to being silvers, maybe a year out. It could be beneficial to have a maximum size that protects those eels that are approaching the silver stage.

In terms of management measures to prevent future increases in effort, we discussed having effort reductions as well as a coast-wide quota. There is no quota coastwide for yellow eels. It would be difficult to establish this. We did talk about how to do it regionally, but it is the type of thing that if the board had an interest in additional information we could conduct analyses on that.

This table shows the number of permits by state, commercial permits. They primarily focus in the yellow eel fishery. For silver eels, again there are not very many fisheries that target silver eels specifically. They are encountered in some fisheries. There is also not a lot of preventing certain fisheries from targeting silver eels, so we thought we would propose some regulations or some ideas that might help prevent

future expansion, such as a maximum size limit, a moratorium on silver eel permits of fisheries.

There are a couple of states that have fisheries that do target them. Season closures; silver eels typically exit in the fall and we could have rolling closures as you move up the coast to try to reduce the chance of encountering eels in these fisheries. And then gear restrictions; silver eels are typically caught by in-stream fykes and weirs. Some other fisheries that targeting different species could encounter eels and we could look at gear restrictions that might address that.

Moving on to recreational fisheries, we felt that these fisheries take a fairly small amount of eels relative to the commercial fisheries, but we do want to try to just address all the different fisheries and look for ways to just increase conservation, if we can. Right now we have a 50 fish per day per angler for most states. This goes back to the original plan.

It doesn't really provide a lot of conservation for eels. It is a fairly large bag limit for a recreational fishery. One idea would be to lower that. That was the primary recommendation for the recreational fisheries. For monitoring, we discussed increasing commercial and recreational reporting requirements; conduct an evaluation of the Atlantic States Marine Fishery Commission Eel Survey Program, primarily focusing on the young-of-the-year survey.

We have very few long-term yellow eel indices of abundance. We would like to find ways to increase those. The same goes for silver eel indices of abundance. This could be rolled into a process where the technical committee looks at all these life stages, young of the year, yellow and silver, and assesses what we have presently and tries to come up with new indices and improved indices.

Then we discussed FERC relicensing as an avenue to get at the mortality that occurs from hydropower and the turbine mortality associated with that. It is an ongoing process. I think it would benefit the commission to be plugged into how that happens; the scheduling, how it occurs; and try to participate in that process if possible.

Finally, habitat; during the last stock assessment the one recommendation that came for the technical committee and was accepted by the board was to increase eel passage to try to increase their access to freshwater habitats. Obviously, we should continue to support it. It is the one way that you can increase recruitment by getting eels to places where they can't to right now.

We talked a lot about the idea of having targets where different areas have actual targets on increasing the amount of habitat they can reach. We realize we didn't have that information really to get to that, so we recommended developing a coast-wide eel habitat GIS data layer that would allow us to really look at that potential and maybe for the next stock assessment have specific targets.

Then law enforcement; the whole point of what happened in the two years for eel poaching in the glass eel fishery, it led to some discussion on what we can do to contribute to improve law enforcement. It really comes down to I think increasing penalties in some jurisdictions. Some states have very low penalties for taking undersized eels. Also, it comes down to coordination and meeting with law enforcement before the season begins and just discussing ways to try to prevent poaching.

Also, there are some discrepancies between what is exported for glass eels. The export records for 2012 seemed to be much higher than the states' records on what is actually harvest, and so we need to look at synchronizing those dealer and export reports, and overall just increase cooperation and communication regarding violations among the jurisdictions. Thank you; any questions?

DISCUSSION OF POTENTIAL MANAGEMENT OPTIONS FOR AMERICAN EEL

CHAIRMAN STOCKWELL: Thank you, Brad and the technical committee for a tremendous amount of work and a very concise summary report. Before we even go into considering next steps, I would just like to take questions first specific to the presentation. Ritchie.

MR. G. RITCHIE WHITE: If you could go back to your first slide on glass eels; when you talk about a quota, when you talk about a difficult relationship between glass eels and mortality of larger eels, how would you determine a coast-wide quota; how could you come up with that number?

MR. CHASE: The discussion focused on really what has been caught in the Maine and South Carolina fisheries, so it wouldn't so much be based on later life stages. It would probably be based on the performance of the fishery. That would be the first place to start is to see what has been caught, maybe look at a distribution of the catch records over time. That was the first point of discussion.

MR. A.C. CARPENTER: I appreciate all the effort that went into this. I'd like to ask a question about establishing a maximum size limit on the yellow eel. Do you have a number in mind? You gave us a range for the minimum size limit, but what size are we looking at here and how are we going to measure it?

MR. CHASE: We've used in the past a SLYME Model, which is a model that looks at the size and life history characteristics of eel and allows to generate an eggs-per-recruit estimate. We would go back to that model based on the interest of the board and look at a range of sizes that would produce benefits. We would look closely at the fisheries and what the fisheries are targeting and what their gear targets. We have no specific sizes to offer today. We would just look to have the board give us advice on what to pursue.

MR. CARPENTER: I guess I'm trying to get down into the weeds here too deep, but how do you measure the size? Are you going to measure it with a girth or are you going to measure it with a length and how are we expected to enforce that?

MR. CHASE: It is a good question but it would probably – you know, we could answer this better once we conduct some analyses. Basically an analysis will give us a target, an actual length, and then I think the discussion would be on do you have gear that would exclude sizes above that or would you had grading on board during the fisheries. I think there are definitely practices that could occur, but I think the first step is to see an interest in this method and then run the analyses.

MR. CARPENTER: One final question; on the yellow eel you have two recommendations there dealing with increasing the size limit and establishing a maximum. You have a reduction in effort, but can that effort reduction be translated to days worked as opposed to permits issued so that you can have seasonal closures and that kind of thing to address the reduction in effort?

MR. CHASE: We did discuss that and the two approaches were to have permit reductions or to have types of seasonal closures, rolling closures, so that was discussed.

MR. ROB O'REILLY: Just two short questions; I'm not sure how effort was characterized to what level. For the assessment, does the committee feel that it needs more information about effort? Was there good catch per effort coming from the states? How general was all that effort information since the effort reductions are talked about?

MR. CHASE: We looked at total permits by state and then we looked at catch-per-unit effort mostly in the pot fisheries; and so for each state we generated indices of catch-per-unit effort in the pot fisheries. That is the information that we have and that would be the two avenues. We would approach that through numbers of permits and through catch-per-unit effort.

MR. PAUL DIODATI: Brad, you had mentioned numbers of permits in South Carolina and Maine. Were those harvester or dealer permits; I wasn't sure about that?

MR. CHASE: Harvester.

MR. DIODATI: So what about dealer permits; the dealers have permits as well, right? Do you know anything about that?

MR. CHASE: I don't have a lot of information on that, Paul. I'm not sure if anyone else does.

MR. DIODATI: I asked because I guess – and I see Joe here and I don't know if he is going to give a Law Enforcement Report, but I'm curious about the conduit for the illegal harvest that we see has escalated in recent years. And how that gets into the marketplace; I don't have a good feel for that. If we are going to make any corrections that are effective, I think we have to understand that conduit. At some point I guess I'd like to have an opportunity to talk about that.

CHAIRMAN STOCKWELL: Good question and I think that's going to fall under our next steps.

MR. DIODATI: Okay, and limited entry; was that something that you said is not in place in those two states for the glass eel fishery?

MR. CHASE: In the glass eel fishery I believe it is for the Maine fishery and for South Carolina. There has more entry recently in the Maine fishery from the Passamaquoddy Indian Tribe. There is not a true cap on entry in that fishery, but I think both states have attempted to cap their number of permits they issue.

MR. CLARK: Brad, A.C. already brought up part of the question I was going to ask about why seasonal closures for yellow eel harvest reductions were not considered; because with the size limits, of course, as he alluded to it is very difficult. Either the eelers are going to get new pots or modify their pots or enforcement is going to have a nightmare there.

A seasonal closure that would go up and down the coast based on the silver eel out-migration, it seems like it would have a double benefit because those few silver eels that might pot up would be protected and it would also reduce harvest of yellow eels for a two-week period or whatever the closure is set at by a state. Thank you.

MR. CHASE: If I can just respond; I agree, John. I think the technical committee was initially interested in looking at minimum sizes for eels and so therefore we would deploy the SLYME Model to look at eggs per recruit. The discussion led us to say why not use that same model to look at maximum sizes to see what benefits might be gained. That led us to a discussion on would there be an application there for a maximum size. We have more direction to give you right now on a minimum size and not so much on the maximum.

MR. CLARK: If you recall, Brad, back in 2008 when we made the last proposal based on the SLYME and then we were looking at a slot size to hopefully let all the bigger eels escape, and I know it was just a lot of the logistics were very off-putting to the board at that time. I just think that the size limits would still have – increasing the minimal would probably be the easier thing to do, but even there it is going to result in some cost to all the eelers. Thank you.

MR. RUSSELL DIZE: In the state of Maryland we have a size mesh on the eel pot. A few years back Maryland changed the size from three-eighths to half inch square. That pot will not catch an eel unless it is eight inches or over. It releases all the smaller eels out of that pot. We only have about ten eel fishermen left in Maryland now, but eels in the last ten years have come back into the upper part of the bay.

Back in the nineties, our eel fishermen had to go down to the Nanticoke or down the bay farther, but now we have eels up into the Choptank River and Eastern Bay and Chester River to where – and years ago just about every crabber had ten to twenty or thirty eel pots to catch crab bait. No longer do crabbers in Maryland use eel for bait. They use chicken necks or something else.

We have less emphasis on catching eels than we did back ten or twenty years ago. The state of Maryland recognized a few years back they had to increase the size and they did increase the size of pot mesh to half and it releases the small eels. A coast-wide ban would really kill Maryland when we an increase in our eels, and we don't think it is called for. Thank you.

MR. PATRICK C. KELIHER: Brad, could you maybe expand a little on your thoughts on the silver eel fishery. You said you thought there were only a few fisheries left. Do you have any indication of how many are left? I know we're down to two weirs fishing in the state of Maine now. Those are grandfathered in; and when they go away, they're gone.

MR. CHASE: Let me first just return to the previous comment from Maryland. The recommendation to have a coast-wide closure for one option was just specific to the glass eel fishery. Then coming back to the question on silver eel fishing, I think the state of Maine and the state of New Jersey has in their regulations the allowance for grandfathered fisheries. I don't think there are other fisheries beyond that.

I think there are some pot fisheries that can encounter eels that are close to being silvers, and there are things we can do in those fisheries and perhaps other fisheries that don't target eels that could release silvers. But in terms of direct targeting of silvers, I think it is just Maine and New Jersey with just a few permits.

MR. CLARK: Isn't it New York?

MR. CHASE: New York, too?

MR. CLARK: Well, I thought it was New York and not New Jersey.

MR. CHASE: I think New Jersey has the allowance for a couple of traditional fisheries, and it could be New York has the regulations that would allow it to happen, but I'm not certain. It is very few.

MR. KELIHER: Mr. Chairman, if you'd like, I can try to address Paul's question regarding the number of licenses as far as the state of Maine and the number of dealers.

CHAIRMAN STOCKWELL: Why don't you put it on the table and then after that we're going to go to Leroy.

MR. KELIHER: The state of Maine has a limited entry glass eel fishery. We have reduced the number of licenses by 75 percent. That was done back in the late nineties. We also reduced the amount of gear by about the same percentage again back in the late nineties. We have currently about 407 licensed glass eel fishermen in the state. Last year 368 of them were active. This year a surprise hit us right in the middle of the fishery when the Passamaquoddy Tribe

and Washington County, both bands of the Passamaquoddy Tribe issued about 250 licenses.

They have the ability by state law to issue licenses to tribe members. For all of the limited entry fisheries when that law was put into place, they were capped at a very small number. Scallops, which is a limited entry fishery, and elvers is a limited entry fishery, but they were not at the time that law went into place, so they found that loophole and they issued what was two or three a year up to about 250 this past year.

At the end of the year, based on our landings program, we had 546 active elver fishermen in the state of Maine. We are going to address that Passamaquoddy issue at the legislature this year and be asking for a reduction in those numbers. Mr. Chairman, while I've got the floor if you want I can just put it on the table.

We have 25 dealers in the state. Six of them have not reported. Our landings went from about 11,000 pounds in 2011 which had a landed value of just under \$8 million, to this year with six dealers not reporting – and this unaudited information – about 18,000 pounds of elvers with a landed value of just under \$38 million.

Obviously, it is an economic boon to the state of Maine, but we also – I just want to be clear to this board that the state of Maine recognizes the issues that we face with this fishery and are very willing to enter into conversations with this board how we can ensure that this fishery can proceed in a way that does not have an impact to the overall population.

The Bureau of Marine Patrol wrote 300 summonses during the fishery this year. The majority of them were fishing without a license. We increased the fines from \$200 for fishing without a license to \$2,000. To use the words of one of our young marine patrol officers, all it did was make the guys run. We had multiple, multiple cases where we caught people several times in the course of the year. I think we have one guy at least six times if not ten. We have a lot of very active investigations still ongoing as well.

CHAIRMAN STOCKWELL: Thank you, Pat. I do want to keep for a number of folks to just keep the questions specific to Brad's report. Leroy.

MR. LEROY YOUNG: Brad, you mentioned poaching problems relative to the glass eel and that coast-wide closure might be a way to address that. I'm just wondering what the thinking is there and that poachers are violating the law as it is; so if more laws are enacted, how would that affect poachers.

MR. CHASE: Well, the thought is that it's an export product. There are only a few places where they are actually shipped overseas. I think the U.S. Fish and Wildlife Service has a fairly good handle or the ability to have a fairly good handle on what leaves the United States. If there is in fact a coast-wide closure, it would be a pretty difficult task and probably a high risk to try to go ahead and harvest and export these eels.

MR. MITCHELL FEIGENBAUM: Brad, having attended all your deliberations at the last two meetings, I also want to share my compliments to the technical committee for its work on the eel file. You made one comment during your presentation and you said that at the last meeting it was your sense of the room that poaching was out of control. But, as I recall I only recall both the representatives from Maine as well as from Massachusetts indicating that the poaching was a significant issue. Was there any other jurisdiction that reported poaching was a major issue?

MR. CHASE: No, you're right, Mitch, we actually went around the table and asked each state what their experience was this past spring, and most states were unaware of poaching occurring. Through our law enforcement in Massachusetts, we did hear of activity in other states, New Hampshire, New Jersey, and I believe some of the southern states had some evidence of poaching. It was probably more widespread than many people were aware of. Certainly, in Massachusetts and Maine, that is where the phrase "out of control" came from, those discussions.

MR. FEIGENBAUM: And just to clarify, part of the discussion between yourself and John and A.C., you have been very clear about where the technical committee stands on the issue of maximum size limits. I understand that you need to do more work. You're going to go back and run the SLYME Model. Maybe I understood the slides, but were you suggesting that seasonal closures or rolling closures was not on the table for yellow eels, because it was my understanding that under the rubric of effort control that seasonal closures – where it says effort reductions, it was your impression that could include seasonal restrictions as opposed to or in conjunction with some changes to the size limits; am I correct?

MR. CHASE: Yes, Mitch, I went through that fairly quickly, but was part of the discussion.

MR. FEIGENBAUM: I have a question and I want to be respectful of Terry's request that I limit my questions to your presentation. I have a question that

I think is really directed towards Bob or Kate or maybe you, Terry, and should I ask it now or would you rather I defer, but it relates to what our goal is here.

CHAIRMAN STOCKWELL: Why don't you hold that thought?

MR. FEIGENBAUM: I will. So then as far as the presentation goes, my only other question now is you indicated at the very beginning of the presentation that the assessment does not identify a correlation between recruitment and adult eel populations. However, in your stock assessment you do give this board two indices of the young-of-the-year recruitment, both a 10 year as well as a 22-year recruitment index.

Am I correct that both of those are not showing any declines in recruitment during those times? I don't mean to sandbag or anything but like that would be I think 6.1 and 6.2 of the stock assessment. In other words, the technical committee has done GLM standardized long-term young-of-the-year indices?

MR. CHASE: Yes, I think there are two ways to look at it, Mitch. In terms of having a specific watershed where you have indices of recruitment for glass eels and then later life stages, that really doesn't exist in the range of the species so having that empirical relationship isn't well established. What the stock assessment did was to standardize the indices and then compare the trends for the different life stages. We do have that and I think right now Genny is looking that up. The young-of-the-year series only go about ten years.

MR. FEIGENBAUM: I think there was one for 22 years at 6.2.

MR. CHASE: The states' glass eel surveys go back about ten or eleven years. There are a few others that go longer.

MR. FEIGENBAUM: With regard to the ten-year survey, it ends at 2010, but is it not the sense of the technical committee that both in 2011 and particularly in 2012 the recruitment reached new highs. In fact, I think someone at the technical committee meeting the last time said the eels were so thick during their particular survey that you could almost walk across them. Did I hear that correctly?

MR. CHASE: I think I've heard that at a lot of meetings. I think 2012 was definitely up for most states and were series highs for glass eels for several states. 2011 for some states was not particularly very

good; some states it was. I think for the Chesapeake Region there is a region of increasing glass eel abundance for 2011 and 2012; not so much for New England.

MR. FEIGENBAUM: Well, thanks, Brad, and I look forward to working with the committee and the PDT as the process goes forward.

MR. WHITE: Mr. Chairman, I just wanted to respond to Mitch that New Hampshire had a substantial amount of illegal activity this past year with over a dozen arrests and a lot more activity beyond that. It is a financial impact on law enforcement because a lot of the activity is at night, so it does make it difficult for them.

It wasn't this year but I know a number of years ago they did arrest a person with North Carolina plates with a BMW that had tanks and aerators in the trunk. That is the extreme that it goes to. It's certainly for New Hampshire being close to legal markets certainly increases the illegal activity.

MR. FEIGENBAUM: Yes, Ritchie, I didn't mean to suggest by my question that I thought the poaching was limited to Massachusetts and Maine. In fact at the technical committee meeting I volunteered that I was aware of poaching taking place in New Hampshire, Rhode Island and New Jersey in what I believe was somewhat significant levels. If my question suggested an impression otherwise, I didn't mean that.

CHAIRMAN STOCKWELL: That is quite an impressive piece of fishing equipment. Rob.

MR. O'REILLY: The next time I'll both questions together, but the second short question was just related to some of the talk that has ensued since I had the question. I asked the last meeting about the use of the elver data and how that was blending into some type of status of the stock indicator, and I think the response from Laura Lee at that time was there was promise there. I guess I didn't get a chance to follow up with her to ask really what does the promise mean? Are the elver collections becoming more important in this process?

MR. CHASE: It is a good question and the technical committee is probably not in full consensus on that question. I think the stock assessment used it. The peer review panel actually strongly recommended that it continue. I think the thought is that it could provide benefits as a long-term recruitment index of recruitment failure or great improvements.

I think one thing the technical committee did want to see was discussion on really taking hard a hard look and maybe having a workshop to evaluate the glass eel index and to make some firm recommendations for future use and at the same time look at yellow eel and silver eel indices and so to have that formal look. We haven't done it in some time. It is a mixed response. The peer review panel did like the young-of-the-year series and felt it should continue.

MR. CARPENTER: On that same topic, our elver survey is well over a hundred miles inland, and you recall on several occasions I really questioned whether we were spending the money for any particular purpose and it was fairly expensive to maintain it when everybody else's sampling locations were much closer to the coast.

At our 2011 presentation of the data, we get a presentation from the VIMS people that actually do the work every year on what was accomplished. There was a notation in that report that the Potomac data, since it is less volatile than a lot of the other stations that they sample, it may actually be more usable in the long run and that they are evaluating that. I just put that out there that once again I'll be proven wrong when I said we didn't need to do something. Thank you.

CHAIRMAN STOCKWELL: Are there other questions specific to Brad's report? John.

MR. CLARK: Just one more; Brad, given the biology of the eels and that every eel we take is a pre-spawn eel – and that was the reason that we approved the glass eel fishery all those years ago – was there much discussion over something like increasing a minimum size limit as just allowing the eels to grow a little longer before they're caught by the fishery. And the same with the glass eels, I know that the reason we allowed that fishery years ago was because the thought was that most of those eels weren't going to make it, anyhow, so we might as well get something out of them. Thanks.

MR. CHASE: Yes, John, I think the discussion was that we were at a point where the stock assessment did point towards a depleted stock, and I think the technical committee felt that we needed to propose some conservation measures. We recognized that a minimum size increase may not have tremendous benefits in terms of eggs per recruit, but we felt that it was really a time where we needed to advance some recommendations and cover all major life stages.

That was the thought. The second piece is that with this season we saw some new dealers purchasing

these larger not so much glass eels but pigmented eels, maybe age ones; and if that fishery were to take off with the present size limits, you could see a large expansion, and so we wanted to try to cut it off with that type of size increase.

MR. FEIGENBAUM: The SLYME Model was constructed by a gentleman – and this is SLYME with a Y because I understand there is a European eel model called SLIME that is completely unrelated, spelled with an I, but the SLYME Model is the product of Dave Cairns. When you ran the SLYME Model the last time we looked at the possible changes to the FMP, I understand you consulted with Dave and he provided advice and guidance to the technical committee in running the models and helping to establish the different slots.

I have a brief comment, but my question is have you reached out to Dave? I understand that is something that you're going to do between now and whenever a plan development team starts working on today's recommendations. Has the team or anyone at the technical committee spoken to Dave because I understand he has really updated that model, feels he has improved it and learned much more about the dynamics to make that a better model?

MR. CHASE: I think Laura Lee on the stock assessment subcommittee is in conversation with Dave, but I think we want to really present general concepts to the board and get your direction on what to actually analyze.

MR. FEIGENBAUM: So the comment I wanted to make was – and I think everyone on the board will find this interesting – Dave Cairns is in fact one of the leading eel scientists in North America. The board has brought Dave in for his expertise on several occasions. He manages the eel stocks and the management of the eel fishery in Prince Edward Island in Canada.

I believe during the technical committee presentation of all the various size limits that exist, there was even reference to the size limit – I don't if it's on the board from today, but he actually has a size limit that is almost – a minimum size that is almost twice as high as any other fishery in North America, and they have no maximum size.

His philosophy seems to be, in direct response to John's point, that by allowing the stock to build up at its younger size, you create so much more biomass; you know, in terms of the numbers of eels, and I think he would report back that his fishery has been

extremely successful by following that approach over many years.

I know there are geographic and physical differences between the fishery and the watersheds in PEI and those that exist on the coast, which really points to the need for specialized and giving states some leeway to reduce effort, but I just hope that the board is – I would like the full board to be mindful of the fact in what appears to be one of the most successful eel fisheries and populations in North America, the philosophy is strictly to allow fishing at the bigger sizes and not the smaller sizes. Thanks.

MR. CHASE: Mitch, I've got a question for you on that. What is the minimum size they have in Canada and are their fisheries primarily focused at food markets that would want a large eel or do they also provide for the bait market like we do here in the states?

MR. FEIGENBAUM: The answer to that question is that there is not a single size limit in Canada. In Ontario there is no eel fishing. In Quebec it's a directed silver eel fishery. In Nova Scotia you have one of the smallest limits, which I believe is 18 inches. Then there are different regions in New Brunswick.

There is the Scotia/Fundy Region which has a – that is the same as Nova Scotia in southern New Brunswick, but on the east coast of New Brunswick they have like an 18-inch size limit, I believe. But, please, for the record, these are just estimates or my best recollection. The point is it varies greatly in all the different markets. A lot of the eels from Nova Scotia and New Brunswick make their way to New England to serve the bait markets in Cape Cod, but primarily the fishery – in both countries primarily is a food/export fishery, to my knowledge.

CHAIRMAN STOCKWELL: We're getting close to wanting to wrap this up so we can start to think about next steps unless anybody else has a burning question. Pat.

MR. PATRICK AUGUSTINE: Mr. Chairman, I'm ready for the next step. Are we ready to make a motion?

CHAIRMAN STOCKWELL: No, I'd like to offer the audience the opportunity. Anyone in the audience have a question they would like to ask Brad Okay, before you go, Pat, Mitch had asked what is our goal. Well, very clearly in May this board tasked the technical committee and the stock assessment subcommittee to develop some options to reduce

mortality in response to the 2012 benchmark, which concluded the stock is depleted.

They have done a lot of hard work. We're here today with a whole list of options to consider. My sense is our next step is for this board to consider the recommendations and to focus it so the PDT can come back to us at the annual meeting. Do you have a motion?

MR. AUGUSTINE: I do, Mr. Chairman, unless you have someone else who wants to add something before I do that.

CHAIRMAN STOCKWELL: Well, you're going to compete with Roy.

MR. AUGUSTINE: **Well, okay, I would move that we first accept the technical committee's report and recommendations as presented.** Second, I would move to –

CHAIRMAN STOCKWELL: Whoa, let's go one at a time.

MR. AUGUSTINE: Well, then make it one.

CHAIRMAN STOCKWELL: Is there a second to Pat's first motion; second by Bill Adler. Is there objection to accepting the technical committee's recommendations? **Seeing none, go ahead.**

MR. AUGUSTINE: Mr. Chairman, **I move that we task staff to develop an addendum that encompasses the options and fleshes out the recommendations from the technical committee and would ask any board member if they might want to add other specific words to fine tune that.**

CHAIRMAN STOCKWELL: Let's get it up on the board. Is there a second to that; seconded by Mitch. While, it is coming up on the board, Roy.

MR. ROY MILLER: Mr. Chairman, apparently at the same time Pat was thinking of this, I also gave consideration to wording a motion, and my motion is very similar. I'll just quickly read it to see any of the wording – if the maker of the motion would be comfortable incorporating any of the wording that occurred to me.

I'm doing this in consideration of possible actions being contemplated by our federal partners and I'd like to be proactive in regard to eels in this. **Therefore, I recommend preparing an addendum that has as a goal furthering eel conservation and includes the ranges of options suggested by the**

technical committee; including moratoria on glass and silver eel harvest; reductions in yellow eel catch and effort; seasonal closures and future monitoring requirements. My colleague also suggested that it consider revising the penalty structure for violations of eel regulations. Those are the ideas that I wanted to throw out, but it is all in the same spirit that Mr. Augustine suggested.

MR. AUGUSTINE: Yes, to the point, thank you, Mr. Miller; the only one that I wouldn't include would be the penalty chart because that might be state driven; and if we were to include it as a part of this motion, I'm not sure it will apply to all states. I would ask the indulgence of the chairman if he believes that we should include that or not. Otherwise, the information is welcomed and please embed it in the motion.

CHAIRMAN STOCKWELL: Okay, without objection from the board; seeing none, thank you being friendly. This was motion was seconded by Mitch. Tom.

MR. O'CONNELL: Just a point on the penalty, I think it is similar to the striped bass addendum we talked about the other day. We understand that those can't be compliance requirements, but it is more of a recommendation that states look at their penalty structure and to enhance them given the concerns about poaching.

MR. DOUGLAS GROUT: I support this motion. The only question I was going to have as I have been reading through the technical committee report here is that under moratorium on silver eels they do make the comment prohibiting possession of silver eels was considered unrealistic by the technical committee because identification of silver eels is not always obvious. I was wondering if we really should include that as an option unless the technical committee still thinks even though it would be unrealistic we should include that in there.

CHAIRMAN STOCKWELL: Brad, could you address that, please.

MR. CHASE: I think the thought was that when eels are in transition it is difficult to identify them so maybe a maximum size limit would be a better approach than actually saying you cannot possess silver eels.

MR. MILLER: My colleague just pointed out that possibly we might want to give consideration to a moratorium on directed harvest for silver eels.

CHAIRMAN STOCKWELL: Well, I would expect the technical committee to develop that into their draft. A.C.

MR. CARPENTER: I think with regard to the silver eels, you can have seasonal closures I think that can be pretty effective without – you know, if you stop fishing during that period of time for any eels, you’ve protected both the yellow eel and the silver eel. I think it should be left in there as one of the options that we’ll be considering.

MR. FEIGENBAUM: First of all, I was happy to second the motion as originally proposed by Pat; but once the – I realize the word “possible moratoria” just means possible. I don’t have a problem with the technical committee considering anything, but I really don’t want my name associated with a motion suggesting that there should be a moratorium on any element of the fishery. I would appreciate it if someone else would second the motion as now written.

CHAIRMAN STOCKWELL: I see a lot of hands and I saw Jaime’s first.

MR. FEIGENBAUM: Then as far as – and I thank you, Terry, for acknowledging the question I wanted to ask, but I’d like to ask it just a little bit specifically. I feel it is a very important question at least as I participate going forward and try to understand better the process of managing this fishery.

My question is addressed to Bob. The mission statement of ASMFC is to promote and establish healthy sustainable populations for all the managed species. My question is, is the goal of our eel management plan to establish and maintain a healthy sustainable population or is it to restore the population to some measure of the population’s historical high regardless of whether the habitat exists to support that population anymore? Is that question clear?

ACTING EXECUTIVE DIRECTOR BEAL: The goal of the American Eel FMP – I don’t have it in front of me, but there are essentially two of them. One is to enhance and protect the eel population and the other is provide for sustainable fisheries. The question you are getting to about what level we’re trying to restore the stock, that’s really the biological reference point issue within the FMP right now.

If the board wants to change any of the biological reference points through this addendum, they will have to provide direction to the plan development

team to do that. If there is information in the latest assessment update that indicated the stock is depleted, if there is something in that document that the board would like to base new biological reference points on, those things are all fair game for this document, but they need to be included in this motion and with clear direction provided to the plan development team.

MR. FEIGENBAUM: So I have a question and I might want to modify the motion or propose a different approach to the motion, but the question is what is currently the biological reference point?

ACTING EXECUTIVE DIRECTOR BEAL: I don’t think there is a rebuilding reference for a biomass or any level of measure of the population right now just because the assessment wasn’t able to provide one.

MR. FEIGENBAUM: Okay, then I would suggest that the addendum include a recommendation as to what would be the appropriate reference point for our rebuilding goals. I would further suggest that the reference point should be to support the rebuilding of stocks to the level where the current habitat can sustain; and to say it in the negative, that the reference point should not be to get the eels back to a 120-year high that existed 40 years ago when the habitat dynamics were vastly different than they are now.

ACTING EXECUTIVE DIRECTOR BEAL: I don’t want to slow down the process, but if you’re getting into rewriting biological reference points, changing the goals and objectives of the fishery management and developing a whole new suite of options for managing all the different life stages of eels, that is a rewrite of the management plan.

That is probably an amendment versus an addendum. If you want to implement, as the motion says, changing some of the specific regulations on life stages, then I think that is fair game for an addendum; but if you’re really – if the board wants to do a wholesale rewrite of this thing, it probably should go the amendment process rather than an addendum.

MR. FEIGENBAUM: And to be clear, I’m not suggesting –

CHAIRMAN STOCKWELL: Hang on; Kate and I just had a sidebar and there are ten weeks of time between now and the annual meeting. There is a bucket load of work being proposed right here. We need additional PDT staff to even pull it off by that time period, so let’s be mindful of what we want to

add into the document. Just briefly, we have other hands up, so go ahead and finish your point.

MR. FEIGENBAUM: Okay, I want to be very clear to all my fellow commissioners. I am not suggesting to slow down the process in any way of moving forward on amendments to the FMP. I do think it is very important, though, that when we communicate to the public that we make clear whether we're trying to achieve conservation based on the facts that exist today.

We all know that habitat is a very important issue. I have circulated a paper today reflecting some excellent work by our Fish and Wildlife Service colleagues that supports the belief of this board as demonstrated in 2008 that increased habitat, improvements in eel passage is the key to improving eel populations.

For us to get the eel populations to where they were in the distant past, we have to provide the habitat for those eels. We know from the recruitment that if we open up the habitat, this paper demonstrates the eels will fill that habitat.

I just want the board to be mindful that in establishing these amendments, which I'm completely in support of and I look forward to working towards, that we have as our goal a realistic and fair one as opposed to one that some might think is from the suggestion of the stock assessment that suggests that the appropriate population – the population upon which depletion has been measured is in fact a 120-year survey index. It is a statistical model and they're suggesting that the population, the depletion level is that which existed over 40 years ago.

MR. O'REILLY: I had thought earlier that with this motion that it would be good to suggest some addition; so instead of doing that I would just like to find out if in this process – and I know there is not a lot of time for the PDT, but it would be good given the management measures that were shown earlier, they're not all the same in terms of the potential impacts to the population or the fisheries; and is it going to be a matter of course that the PDT would have a small summary of that on the management measures, what their impacts might be for the fisheries, which ones might have large conservation benefits, which is the first thing that Jaime had talked about this morning. I think if something like that could be done it would be very good, and it might save some time at the next meeting; instead of debating which one has the greater impacts and where and

which state and going through all of that, it might be a big help to us.

MS. TAYLOR: As Terry mentioned, there is a short amount of time between now and the annual meeting. The PDT currently has one member on it, so we will need a lot of additional support if we want to go forward with developing these options. Information such as what you're requesting, Rob, will take additional time, too, so if we have the support to develop this we certainly will try to get it done by the annual meeting.

CHAIRMAN STOCKWELL: Other comments? Comments from the audience? Back to the board? I saw Mitch; you get one last short burst and then we're –

MR. FEIGENBAUM: Just who are the members of – who is the sole member of the PDT at this time?

MS. TAYLOR: Gail Wippelhauser from Maine and myself.

CHAIRMAN STOCKWELL: So we need more help. The motion is to prepare an addendum that has the goal of furthering eel conservation that includes the range of options suggested by the technical committee; including possible moratoria on glass and silver eel harvest, reductions in yellow eel catch and effort, seasonal closures and future monitoring requirements. Motion made by Mr. Augustine and seconded by Dr. Geiger. Is there objection? **The motion carries unanimously.** Okay, we are quite serious about needing some help to get this out the door. Dr. Geiger.

DR. GEIGER: Mr. Chairman, the Fish and Wildlife Service will be glad to add two or three names to help in this endeavor. Kate, I will get back to you with those names as soon as possible.

OTHER BUSINESS

CHAIRMAN STOCKWELL: Thank you very much. We're on to other business. Leroy

MR. YOUNG: I would like to recommend John Pedrick to added to the advisory panel for American eel.

ADJOURNMENT

CHAIRMAN STOCKWELL: Is there objection? Okay, without objection, thank you very much. Is there any other business to come before the Eel

Board? Thank you for a productive morning. This board is adjourned.

(Whereupon, the meeting was adjourned at 10:35 o'clock a.m., August 9, 2012.)