

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

**February 22, 2006  
Doubletree Hotel Crystal City  
Arlington, Virginia**

## ATTENDANCE

### Board Members

George Lapointe, Maine DMR	Bernard Pankowski, proxy for Sen. Venables (DE)
Dennis Damon, Maine Leg. Apptee.	Russell Dize, proxy for Sen. Colburn (MD)
John Nelson, New Hampshire F&G	Bruno Vasta, Maryland
Peter Whelan, proxy for Dennis Abbott (NH)	Howard King, MD DNR
G. Ritchie White, New Hampshire	A.C. Carpenter, PRFC
Paul Diodati, Massachusetts DMF	Jack Travelstead, Virginia MRC
William Adler, Massachusetts	Kelly Place, proxy for Sen. Chichester (VA)
Vito Calomo, Massachusetts	Cathy Davenport, Virginia
Jerry Carvahlo, Rhode Island	Preston Pate, North Carolina DMF
Eric Smith, Connecticut DEP	Mel Bell, South Carolina DNR
Lance Stewart, Connecticut	Robert Boyles, proxy
Gordon Colvin, <b>Chair</b> , New York DEC	Malcolm Rhodes, South Carolina
Pat Augustine, New York	John Duren, Georgia
Tom McCloy, New Jersey DFG&W	April Price, Florida
Erling Berg, New Jersey	Gil McRae, Florida FWC
Leroy Young, Pennsylvania FBC	Tom Meyer, NMFS
Frank Cozzo, proxy for Rep. Schroeder (PA)	Wilson Laney, USFWS
Roy Miller, Delaware DFW	

### Ex-Officio Members

Steve Gephard, Technical Committee Chair  
Matt Cieri, Stock Assessment Subcommittee Chair  
Dave Secor, Peer Review Panel Chair

### ASMFC Staff

Lydia Munger	Carmela Cuomo
Bob Beal	Julie Nygard
Vince O'Shea	

### Guests

Steve Doctor	Bennie Williams
James Trossback	Eric Robillara
Maddy Silgrist	Charles Sensiba
Mari-Beth DeLucia	Barry Kratchman
Mike Hendricks	Derek Orner
Elizabeth Williamson	Terry Stockwell
Jill Hepp	John Homa Jr.
Kim Damon-Randall	Chad Lynch
Howard Townsend	
Doug Dixon	
Nancy Skancke	
Kevin McGrath	

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**MOTIONS**

MR. AUGUSTINE: Mr. Chairman, I so move we accept the stock assessment report and the peer review panel report for American eel.....22

MR. PATRICK AUGUSTINE: I would move that we approve Addendum I to the ISFMP for American eel with Option 1A and Option 2, and then I'd like to comment on it after.....34

But I don't know that we can define the difference between silver and yellow eels with enough confidence to be able to have it become a useful bit of information so I would move to amend the motion, striking the requirement for the life stage reporting.....36

MR. MILLER: Could we amend the motion to substitute an or between 1A and Option 2 and strike the and? Would that do it?.....39

CHAIRMAN COLVIN: And indicate further I think it would be helpful if the substitute motion further indicated that the states' implementation plan would address how the necessary data would be provided.....39

Okay, we're going to act then on the substitute motion, which I will now read. I move to substitute to approve Addendum I to the American Eel FMP with the states implementing either Option 1A or Option 2 to collect the data detailed in Draft Addendum I. State implementation plans should specify how the required information is to be obtained.....41

So it would be move to set the implementation date for 1 January 2007 -- and should we roll in, what was the other part -- with the possibility that the states that need to go to the legislature would have an implementation date or could have of 1 July 2007. And then state plans, should we make this a part of that as well?.....43

MR. McCLOY: Yes, I would. I'd like to move that the board approve the nomination of James Brown as the commercial potter eel advisor from the state of New Jersey.....47

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The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Washington Ballroom of the DoubleTree Hotel Crystal City, Arlington, Virginia, on Wednesday, February 22, 2006, and was called to order at 2:45 o'clock p.m. by Chairman Gordon C. Colvin.

**WELCOME/BOARD CONSENT**

CHAIRMAN GORDON C. COLVIN: Welcome to the meeting of the American Eel Management Board. You have before you the proposed agenda for the meeting. Is there any objection? Are there additions or corrections to the proposed agenda? **Without objection, we'll proceed on that agenda.**

The proceedings of the October 31<sup>st</sup>, 2005, board meeting have been distributed. Are there any additions or corrections to those proceedings? A **motion to approve**, Mr. Augustine; seconded, Mr. Adler. Is there objection to the motion? Without objection, the motion carries; the proceedings are adopted.

**PUBLIC COMMENT**

At this point in time, we are on the public comment item on the agenda. I would ask if there is any public comment now on issues that will not come up later on the agenda. If you have a comment on an issue that will be on the agenda for later, you will be able to provide any comments you have at that time.

With that caveat, is there any public comment to come forward at this time on general issues? Seeing none, we'll proceed to the 2005 stock assessment. The first part of the report, the stock assessment report will be presented by the chairman of our stock assessment subcommittee, Matthew Cieri.

**2005 STOCK ASSESSMENT**

DR. MATTHEW CIERI: All right, as already introduced, my name is Matt Cieri, and I'm the stock assessment subcommittee chair. First I would like to go over and thank a lot of the other assessment scientists that helped out on this report, including myself, Laura Lee, Michelle, Vic, Jeff Brust and Keith. They did an amazing amount of work. Also, a lot of other people contributed time, effort and data to this endeavor.

The life history of American eel is that it ranges from Labrador to South America. It's a catadromous species and is also panmictic, meaning that it resides in freshwater for a period of time and then moves out into the open ocean for spawning.

It's a panmictic stock, meaning that the entire species spawns in only one location, in this case in the Sargasso Sea. They produce a very unique leptocephalus larvae in the Sargasso Sea which then passively drift towards the coast.

Later on they enter estuaries as glass eels after transforming from a leptocephalus to a more familiar glass-like eel. Then they enter the estuaries up and down the U.S. and Canadian East Coast.

They reside in estuaries for a time and then become fully pigmented before many of them move further into upstream habitats where they grow anywhere from 6 to 16 years, in many cases much longer, in some cases a little shorter, depending on a latitudinal climb. However, there is some recent suggestion in recent research that that might not be the case.

After maturing at different varying lengths of time, they mature into silver eels which are radically different than yellow eels, the juveniles that reside in fresh and estuarine waters. They perform a very radical downstream migration and then back out to the Sargasso Sea for spawning.

After spawning, they pretty much die and do not return for a second spawning period. As such, the mortality that's incurred in any of the coastal zone areas is all pre-spawning mortality.

For this assessment, we actually had a lot of data sources to do some of our work. These included landings data from both the federal and state governments, for both Canadian and U.S., as well as FAO.

For a dependent survey -- for fishery-dependent we had a pot CPUE index generated for the Atlantic U.S. East Coast. We also had state-by-state young-of-the-year surveys that were instituted in and around somewhere between 2000 and later.

There was also a set of bridge tow collections that are collected in both New Jersey and North Carolina. These are

passive plankton nets that are deployed on spring tides -- on incoming tides. And they measure relative abundances of many different species, including eels.

In addition, there are many yellow eel surveys that consist of electrofishing as well as hydro-dam counts and some trawl surveys from up and down the U.S. East Coast. Some of these occupy estuarine habitats; others, freshwater.

In addition, there is the Canadian data that has been talked about here and there up and down the East Coast, including the Moses-Saunders eel ladder, the Bay of Quinte Trawl, which I'll get into a little bit later, and some DFO electro-fishing surveys that are conducted in Eastern Canada.

The general methodologies for this assessment, in general, most of the analytical methods that you use for stock assessments are pretty much not appropriate for this species. There is a lot of data gaps, et cetera, et cetera, et cetera.

So age-structured modeling and in fact any other type of modeling is very, very difficult to do with the data at hand. We decided, however, to run an ASPIC model, which is a surplus production model, anyway. Some of you might be familiar with it from other species. I'll get into that a little bit later.

However, we wanted to focus most of our attention on a series of independent and dependent indices from up and down the U.S. and Canadian East Coast. Where available, we used geometric means; however, arithmetic means was used for some of the data and that depended on availability.

So for each one of these indices, we used a Z-scoring method which basically takes all

of the relative indices and produces a mean of zero and a variance of one. This makes it easier to compare surveys so that you're not comparing something that varies between a million to two million with something that varies between ten and twenty.

In some cases, we attempted to do regional or coast-wide indices and bring some of these indices together by averaging these Z scores and then rescaling them again. I'm sure Dave will get into a little bit of that a little bit later.

For some of the landings' stuff, this is general U.S. landings by region, including the Gulf of Mexico, the South Atlantic area, Mid-Atlantic and North Atlantic. This is all in your document. Just for information, the figures here are the same figures that are in the document if you wish to look them up and you can't see them fairly well.

So here we have landings in metric tons and a data stream that goes back to about 1950. As you can see, there has been relatively low levels of eel landings here followed by an increase starting at about 1970-'71, peaking at about the late '70s and the declining since then.

If we look at the landings in Eastern Canada, we see a very similar picture, although the time series is much shorter. Again, we've got fairly high landings here from the '70s through the '80s up until about 1990-'92, and then again we see a decline.

We even ended up getting some landings information from the Caribbean, and this would be a place that I would like to sample firsthand, if I can, George.

MR. GEORGE LAPOINTE: Put in a request and we'll consider it appropriately.

DR. CIERI: Yes, we really need fishery-dependent sampling down here. But we do have some landings from the Caribbean. However, notice the landings are in metric tons. They peak at about 40, compared to about 800 for the Canadians and well over 1,600 in the U.S.

As far as who does most of the landings by gear type, most of the U.S. landings are, of course, by pots. There is some pound net landings as well and a little bit of spears and weirs and some other things, including some trawl and gillnets.

However, one of the things that came up during the assessment process is that it was realized that much of the landings actually occurs on individuals that are greater than 400 millimeters. Basically that's a 16-inch eel. And as research has shown, almost all eels above 16 inches are female, so the predominant amount of your landings are coming out as female biomass.

We have limited information on recreational harvest. Remember, MRFSS doesn't really extend very far into freshwater in most cases, and so that's where a majority of the eels are collected. We do have some information -- again, it's probably on the order of the Caribbean landings -- in metric tons at about 40, jumping to 70 and has since declined.

One of the things we did do was we attempted to do a CPUE index using basically pots fished per day up and down the East Coast. There are many places that have pot fisheries, as I've shown. It's about 80 percent of the landings. So we attempted to use that as a fishery-dependent indices of abundance with a concentration predominantly in the Chesapeake Bay, which is where most of the eel pot fishery occurs.

In general, what we have is an actual rising in the CPUE index since about 1992, going from about here and then trending upwards. However, one thing to keep in mind and something discussed by the stock assessment subcommittee is that effort has also declined in this particular area.

And we do believe there has been a change in Q, a change in the catchability in that in some cases many of the individuals that fish for eels have gotten out of the business for one reason or another. So there are less people and less gear in the water, but they are more effective.

Something else that we have is the young-of-the-year surveys – again, this should be in the document. It's a listing of all the young-of-the-year surveys by site up and down the East Coast that I believe has been mandatory in the Eel FMP.

In general, many of these time series are extremely short. The longest ones run from about 2000. However, there has been changes in methodologies in the states. Each of the states run a different type of survey, different gear type, different area in which they are fished.

But in general this sort time series in many cases is what hampered this being used as a cohesive time series across to look at recruitment. And so for this particular assessment, this was found not to be quite so useful in assessing this particular species. However, Dave, I'm sure, will get into other aspects later on.

When we take a look at those passive net tows that were conducted by the National Marine Fisheries Service out of Beaufort, as well as the Rutgers Field Lab, we have some data that extends back to about the mid-'80s, particularly for the one out of Beaufort.

In general it has been pretty flat, highly variable, but fairly flat. The one that was conducted in Little Lake Harbor from the Rutgers Field Station similarly has had a large data point back here at the start of the time series in 1989 and has since remained fairly flat.

In general, running a linear correlation between these two indices do not correlate well with each other and they don't correlate well with some environmental variables that you might think; for example, stream flow, temperature or major wind patterns.

But there is some other interesting data that comes out of this particular type of a study, and this was taken from Mark Sullivan's work. Basically, here for the one that was taken in New Jersey, if you look back here in 1989 going towards 2000, if you look at the density that comes in, basically when is the peak elver migration and when is it collected in this particular survey, where the density of this particular bubble plot is proportional to basically how much has come in, how much that were caught, and the dark circles are pretty much the peak times of when these eels ingress.

As you go later and later -- as you go basically back in the time series, eels used to come in a whole lot earlier than they typically do now, so that peak time of when the peak migration for glass eels coming into this particular sampling site was much earlier than it is currently, which is a very strange occurrence.

However, if you take a look at Beaufort, which is not that far away, maybe just a little bit down the coast I guess in terms of the eels' home range, you find no such pattern. There is no real pattern across years as to when the eel migration is taking place.



So you've got two separate signals used basically at two separate surveys using very similar gear and similar methodology. The other interesting thing is that at the New Jersey Little Egg Inlet Site, eels have been getting progressively smaller. So not only are they coming in later and later as time goes by, but they're also getting smaller and smaller.

That relationship actually holds a little bit true for Beaufort, but it's not as strong and certainly not statistically significant. So, again, different signals not only in timing of when the migration happens but what type of eel comes in.

Okay, getting into some of the Canadian independent data, this is eel counts of the Moses-Saunders Dam on the Quebec. And, in general there were fairly high numbers of eel counts back in the late '70s-early '80s.

We're looking at about 25,000 eels per day during that peak 31-day migration window. I believe now it's down to about 5. There has been this rapid decline starting at about the mid to late '80s.

If we would look at the Bay of Quinte Trawl Survey, which is conducted on Ontario, a map of where this occurs is also in the document, again you see a very similar pattern. This survey has been going on since about 1972; highly variable with an average that's fairly, fairly high in the number of eels collected per nautical mile.

But since about the early 1990s that particular index has gone down to very, very low levels. One important thing to note is that this eel count and this trawl survey occur in the same drainage. So basically the eels here have to pass through this survey first before they get there.

A lot further down the coast, looking at the VIMS Trawl Survey, which also collects eels in pretty decent number, we see a very similar pattern of what we see in the Bay of Quinte in Ontario: highly variable but fairly high levels here in the '70s until about the early '90s, and then progressively going down fairly steadily and fairly rapidly.

Overall, however, the mean length collected in this trawl series has actually gone up. The individuals on average were ranging at about 250 millimeters and now they're getting closer to 350 millimeters. So the numbers of individuals have been -- the biomass has been going down; however, the number of individuals that are larger have been going up.

Bringing all these indices together to try to get a cohesive coast-wide standardized index, we attempted to do this from about 1994 on as outlined in the methods by averaging Z scores. And if you take a look at this, this data pretty much comes from Maine, Connecticut, New Jersey, Pennsylvania and Virginia, basically the trawl series.

They're all outlined as to which surveys were used in this particular indice. As you can see, the standardized CPUE index has gone down quite a bit since about 1994 until about 2004.

In addition, we also have electro-fishing surveys that are done by DFO in Eastern Canada. These include -- and if I butcher the names Steve is going to kill me -- the Restigouche, the Miramichi and the Margaree.

MR. STEVEN GEPHARD: Two for three.

DR. CIERI: Two for three. In general,

these are electro-fishing surveys that are not specifically targeting eels. And if we take a look at eel densities for each, it's very, very noisy.

However, there is some indication, particularly for the Margaree, that things have been declining over time. And in fact, if you take a look at the Miramichi, things have also been declining over time in eel density.

If we look at another electro-fishing survey, which is what we kind of term a mixed, it's both fishery independent and fishery dependent as outlined in the document. It used to be a fishery- dependent indices and now that person has been contracted to perform the survey continuously.

Again, what we see is this rapid decline since about the mid-'80s to early 1990s and then this rapid decline in number of eels fished per hour down to about zero.

Again, one thing also to keep in mind is that this is in Lake Ontario, which is the same as the Bay of Quinte trawl and the same area as the Moses-Saunders Dam counts. So all three of these indices should be related and should be telling you the same information, and in fact they do.

To summarize each of the independent and dependent indices that we have seen coastwide, we have a number of different surveys that I've just gone over, including the coast-wide pot CPUE, the Moses-Saunders, the Bay of Quinte, the VIMS trawl series as well as the standardized yellow index, our electro-fishing indices from Eastern Canada.

Basically, I've also listed whether they're independent or dependent, their timeframes and whether or not the stock assessment

subcommittee and TC thought that they were either increasing or decreasing in a qualitative sense.

In general, with the exception of the coast-wide pot CPUE, none of the indices seem to be increasing at all. And in fact the ones with the stars next to them are indices that are measuring eel abundances at or near their historic lows.

In addition to all of this, we attempted to do this ASPIC run, basically this was a way -- we had CPUE data. We also had independent survey data as well as landings data, and so we decided to attempt an ASPIC run.

ASPIC is a surplus production model that's not age structured. In general, the difficulty lies that in particular our CPUE indices are not exactly correlated with our fishery-independent indices.

So there is a lot of difficulty and the model becomes conflicted. In general, the model kept hitting localized minimum when it was trying to be run. So what we attempted to do was do a FIT model basically with all of the indices weighted equally.

It gave us some results; however, the results are very, very difficult to interpret. For example, they don't fit well when you look at the residual patterns with the electro-fishing indices.

Again, we tried the same model but with a different type of a weighting system. Basically we told the model to weight the indices itself, you know, go ahead and do what you think is right.

And in general what ended up happening is we got a completely different answer than if we weighted all the surveys the same, and

we know that's probably not going to be the case. Yes, we still see this really bad -- what we call a retrospective pattern in some of the indices.

So, after all that gobbledy-gook, we pretty much concluded that the ASPIC model is not exactly the best thing to run on eels at this particular time. It would need a lot of work in order to run it by looking at some of the surveys and deciding whether or not to include them or not to include them.

We do think this might be a way of doing things in the future. However, it needs a lot more work, and it was not appropriate to use it for this particular assessment.

As you will notice in the assessment document, there is something called Appendix B. Appendix B is data that was actually presented at the Eel Assessment Workshop but wasn't exactly available to the stock assessment subcommittee during the analytical process, pretty much as the result of a management data oversight error.

These included some fairly important indices, including indices from the Delaware Trawl Survey, some additional Canadian indices that were not in the rest of the main body of the document.

In general, we didn't have a whole lot of time since discovery of this particular oversight in trying to get them into the document. That's why they were not incorporated. However, what we did do was take some of the data and treat it in a similar manner that we treated the rest of the independent and dependent survey indices.

We still need to go over some of these indices to make sure that the raw data fit and that the samples are appropriate; however, in general, we tried to do the same methods

that we did with the other indices in the main part of the document.

Basically, what we wanted to do was to report on this data availability and to bring it forward to the rest of the stock assessment subcommittee, the technical committee and to you guys to make sure that everyone is aware that we did take a look at this stuff and to make it aware and on the record for future assessments.

We also wanted to make sure that this new information that was included didn't radically change how we perceived the stock status to be. I'm going to briefly go over this stuff.

They included a number of electro-fishing estimates from the Saint John, Saint Mary's and Stewiacke as well as some commercial fyke net dependent indices for both sub-legal eels and legal eels, as well as the Delaware Trawl Survey information.

For the Stewiacke, in general we took a look at this particular survey and realized that it seems to be again in decline. While it is highly variable, and there are some years that are missing, there does seem to be this general trend of decline throughout the time series.

Saint Mary's is missing quite a lot of data for the interim years between 1986 and 1995. If you ignore these two particular points, what you end up with a general feeling in a qualitative respect is that the numbers have certainly declined, particularly over the last four years.

One of the interesting things we also had was two surveys, one conducted below and one conducted above a dam in the Saint John's River. For the one below the dam in the Saint John's River, there seems to be a

fairly steep decline in eel abundance. However, for the one above the dam in the same river, there doesn't seem to be much of a trend at all.

For our two dependent indices, we've got the Prince Edward Island Standard CPUE index which has noticed a fairly marked increase in the CPUE index over time, since about 1996, and a fairly flat or no trend for the sub-legal eels in that same survey.

It's very interesting to note that both of our dependent CPUE indices are both trending upwards. We feel that in some cases that might be due to market conditions as well as economics rather than eel availability.

If we look at the Delaware Trawl Survey, there is absolutely no trend at all. It's highly variable throughout the time series. However, the trend is extremely flat. When we include the Delaware Trawl Survey into the coastal yellow eel index as we prepared before, it doesn't make a lot of difference in that whole standardized coast-wide index.

Here we have it with the Delaware River in the dark squares and without the Delaware River in the open triangles, and there is not much of a difference in that coastal yellow eel index at all.

So if we do the same thing that we did with our previous independent and dependent indices where we take a look at them step-by-step, you can see that with the exception of one of our CPUE indices, most of our indices either have no trend or are in fact declining.

As such, the data contained within the appendix and was not available for further analysis does not change the stock assessment findings, the management advice, and/or our take on the stock status.

So nothing really has changed with the addition of this data.

Okay, I'm going to go over each of our responses to the terms of references. These are all listed in the document if you'd like to take a look at them. For the first term of reference, to evaluate the adequacy and uncertainty in the fishery-dependent and independent data sources, we looked at a number of fishery-dependent and independent sources.

Those included were ones that we thought were important to either a particular region or important to the entire stock as a whole. Some data were left out and that's because they didn't have a sufficiently long time series, didn't have a very strong methodology.

They didn't routinely collect eels, for example. And these included, as an example, some of the young-of-the-year surveys conducted by the states.

To look at the analytical methods that we could use to employ for determining stock status for American eel, we pretty much, as shown in Table 11, rejected almost any other analytical method other than independent and dependent indices of relative abundance.

We did attempt an ASPIC run which we thought might be useful in the future, but it's not currently ready for management use, basically to look at fishery stock status or for this particular stock and to see if we could develop reference points.

We could not actually develop quantified reference points for this stock. The data is just not there, particularly using relative indices of abundance. We reviewed a lot of independent and dependent indices. Nearly all show a decline, many of which are at

their historic lows.

There was concern given the relative abundance that are shown by these surveys, as well as given the biology of this species, that if this decline continues, there's a realistic possibility that this species will not maintain a healthy and viable population throughout its historic range.

Again to go back to the biological reference points, our take is that there was insufficient data and insufficient analytical methodology to use and make some sort of sense out of a biological reference point for this stock.

We developed a number of research recommendations on how to approve the assessment. It's one of the things that biologists do really, really well is try to figure out research recommendations.

There are 14 of them that are listed. I'm going to summarize most of these. A lot of these deal with taking a look at habitat issues, landings issues for both personal and recreational as well as commercial fisheries as well as things such as discard, upstream and downstream passage, disease and pollution.

That pretty much boils down all 14 of these. There are specific recommendations that are outlined in the document, and there are some more that will come probably from the peer review. And that's it.

CHAIRMAN COLVIN: Well, let me offer a suggestion. First of all, thanks to Matt and the members of the stock assessment subcommittee. We handed them an awfully big job and not an ideal amount of information.

And we do appreciate -- I know a great deal of effort went into the development of the work that they did and we appreciate their

effort and we appreciate all that they've done here with a complicated problem. We appreciate that.

I think it might make sense at this point, so that we don't start duplicating questions and issues, to jump right into the report of the peer reviewers. And without objection, then I'm going to ask Dr. David Secor, the chairman of our peer review panel, to present the peer review report.

DR. DAVID SECOR: Thank you, Chairman Colvin. Well, you can see eels are pretty smart about spelling things out for themselves. But they're awfully slippery and mysterious in terms of trying to spell out how we might go about a stock assessment on a coast-wide basis. The panel certainly appreciated the difficult charge given to the assessment subcommittee.

Our panel included myself; Gerald DePutt of DFO -- I think this was a very nice addition -- Gerald was involved in the ICES assessment work and represents Canada; Dr. Jeremy Colley of the University of Rhode Island, an assessment expert that many of you are familiar with; and Dr. Joseph Hightower, also an assessment expert but somebody who has put his hands around eels on occasion.

All right, launching right into the terms of reference, first one, evaluate fishery-dependent and fishery-independent data. There was this data workshop in May 2005 in Baltimore that Matt did a nice job reviewing.

And from this, the subcommittee determined that there were nine series sufficiently reliable for trend analysis. The panel thought that there were some important fishery-independent series included in past American eel assessments that were not considered.

This is going to be kind of a recurring theme in our comments, that an important ICES, that is, International Council for the Exploration of the Seas, assessment that occurred in New Brunswick in 2000, and the report came out in 2001 -- this involved European, American and Canadian scientists. It was a very thorough document, and it was not referenced in this assessment.

And this document, it contained a lot of elements that would have provided a very good starting off point in the current assessment by ASMFC. Richkis and Whalis also provided a nice review of fishery-independent data sets.

At issue here is that these data sets were not represented at the data workshop, so there seems to be a gap here in terms of sometimes it may be necessary to go out and chase down these surveys.

Several series that the subcommittee considered inadequate were deemed valuable by the panel, including the Delaware Trawl Survey and two glass eel research data sets that Matt did a nice job reviewing.

The fact that the Delaware Trawl Survey was without trend may be beside the point. It's still a very long time series representing a fairly good spatial coverage, and we thought it should be included.

I'll go into the two glass eel data sets and their value later. We did agree with the subcommittee that landings should not be considered as a very precise indicator of stock status trends.

Continuing on, the panel felt that there was a lot of published data that had come out during the last five or six years that was not

reviewed in the current assessment. This is not just very esoteric research; this is published work on assessments of eels, published work on broad scale demographic studies of eels that could have been used in this assessment.

And you can see that very few recent papers were actually cited in the current assessment. The ICES benchmark was not presented, nor was any biological data that might be relevant to the assessment presented in the current assessment. We felt that the data sets corresponding to the fishery-independent survey should have been more fully documented.

There are already beginnings of tables in the assessment but a recurring theme as well as increase of transparency of the assessment process so characteristics associated with those surveys should be tabulated as well, as well as a brief justification for why the assessment subcommittee decided to include or exclude a certain survey from their consideration.

And a minor point perhaps for this group, but for future work it would be very useful to provide both arithmetic means and geometric means associated with the trends or the surveys because either can be used in various assessment models in the future.

Term of reference two, evaluate models and analyses used for analysis in assessments and estimating population benchmarks. No model was included in the formal assessment but a surplus production model was explored in the appendix. Matt talked about that.

The panel thought that the surplus production model has promise, that there is a long duration of catch, fishery-independent series. A good example is the VIMS one.

And we do agree that reliability of the commercial data needs scrutiny as part of this, and you can do this through various trial simulations of the ASPIC model.

So we thought the ASPIC model in the current assessment should be explored more carefully. Even though we may anticipate it gives negative results, we've got to provide guidance for the next assessment in our opinion. And we gave a series of specific recommendations to do this.

In the future we would look toward a delay difference model as a perhaps advance in incorporating a life history more realistically. And Matt reviewed the lifecycle, and there is very little we can know about silver eels or leptocephali larvae.

But we are measuring, in some surveys, glass eels or young-of-the-year or small yellow eels, elvers coming in. We are measuring yellow eels. And in accounting for recruitment and abundances of eels that are in the fishery, we can set up a two-stage delay difference model perhaps in the future that would be used to good advantage.

Continuing on with term of reference two, looking at trend analysis now, the subcommittee qualitatively addressed trends of American eel. They said that this survey was stable; this survey was going down; this survey was going up.

And they developed combined trends using the Z-score approach that Matt reviewed. The panel thought that this should be put into a quantitative framework.

You can do changes in log-transformed abundances and that can give you instantaneous annual rates of change so we can say that one survey is showing a 10

percent decline on an annual basis and another survey is showing a 50 percent decline on an annual basis.

Another approach would be to use a quartile or quantile approach, that we are now in the lower 20<sup>th</sup> percentile over the last three years in comparison to the historical survey. These are fairly easy things to do and we thought it should be put in that kind of framework.

A combination of surveys using Z transformation results in significant bias is probably not appropriate. We suggest that the general linear model approach be used and we provide specific guidance in the document on how to do that.

And as Matt noted, some surveys of the nine are not independent of one another, and that deserves additional scrutiny in terms of their inclusion as independent surveys in addressing the stock status.

Term of reference three, estimate and evaluate fishery and stock status, the subcommittee said the small number of fishery dependent/fishery independent, they qualitatively addressed these for trends. Most surveys showed no trend.

The Ontario-specific surveys and the VIMS surveys showed fairly steep declines. And they showed, as has been said, landings probably are not a good indicator of trends in abundance.

The panel did a preliminary quantitative trend analysis and showed similar results as the subcommittee's qualitative analysis, so we don't say anything different in terms of our conclusions. We only ask for transparency rigor that a more quantitative approach is used.

For instance, in our preliminary analysis, we showed a 99 percent decline in Ontario indices over the most recent 11-year period and in the data set a 50 percent decline in the VIMS indices. And the two glass eel indices were indicative of sustained recruitments during the last 15 years.

This is one way we thought might be -- or Dr. Colley thought might be helpful to present the surveys. This is on the log ten scales and it shows the surveys arrayed from north to south.

And you can see that when we look at the dash lines, which is the central tendency of these surveys, that we see the declines in Quinte Bay and Moses-Saunders ladder surveys, and that's calculated at negative 35 percent per year over the recent period.

We see no trends for a wide series of New England and Mid-Atlantic states -- as Matt said, probably due to the very short duration of these series. And then we get down to VIMS and you can see here that those trends are all going down in the recent period on the order of negative 7 percent for the main stem trawl survey and negative 18 percent per year for the individual sub-estuaries.

This is an example of how you can combine up surveys as using the general linear model approach. The nice thing about this approach is it can give you confidence intervals and it can also show how the individual surveys weight the overall trend.

And what is shown here is that the VIMS survey very much has a very strong weighting. It's the longest duration and the highest precision survey, and it contributes most heavily to the overall trend.

Landings data, there is a coarse kind of correlation. I'm a little cautious saying that

in terms of the recent fishery- independent indices going down. But as I'll reiterate, it's probably not a good indication of stock status.

I put this up here to show that Chesapeake Bay is the center of landings, so this also emphasizes the VIMS trawl survey as a potentially very valuable survey of yellow eel abundances.

Term of reference three -- finishing up -- I think this is a very important statement. It is in concurrence with the stock assessment subcommittee. The panel agreed with the subcommittee conclusion that the abundance of yellow eels has declined in the last two decades and the stock is at or near documented low levels.

If the decline noted in the yellow eel indices represents a coast or species-wide phenomenon, then there is a risk that spawning stock biomass has also declined leading to increased likelihood of recruitment failure.

We're only saying that this is within the domain of future possibilities. I think it places emphasis on those surveys that can give us warning signals about range contraction of the earliest stages of eels or lack of sustained recruitment, absence of glass eels or elvers coming in.

Term of reference four, estimate biological reference points and stock status relative to these reference points. The subcommittee, as you just heard, said there was insufficient information to develop reference points.

We really differed on this point because in fact in the ICES document, there is a very substantial section on biological reference points for American eels. There is precedent for European eels as well.



Both use the spawner-per-recruit approach that you're all probably fairly familiar because it's used well within ASMFC for Atlantic sturgeon, also historically for Atlantic menhaden. And we have sufficient demographic information to develop this approach for American eels.

Also, even if you could not come up with a biological reference point, the panel felt it was very important to give guidance for the next assessment by providing critical discussion on how you might develop biological reference point, recruitment, historical indices -- everybody knows the magic number is seven for striped bass -- area-swept abundance estimates which may be possible for a demersal species like eel, approaches for estimating exploitation -- of course, that's going to be critical if we develop biological reference points. We've got to have exploitation rates to compare them against.

And as an example of demographic information, here are otoliths from two different eels collected from the Hudson River, one from George Washington Bridge, one from Kingston, about 80 miles upriver from George Washington.

These eels are the same size. George Washington Bridge is Age 6 and you can count out the rings. It's not rocket science. The Kingston eel is 26. Now what would you say about that in terms of trying to protect for a spawner escapement?

You could probably have a higher exploitation rate at George Washington Bridge, if you wanted to eat contaminated eels, than you could at Kingston. So we have enough information on a regional basis to start looking at developing SPR approach.

Term of reference five, recommendations.

Yes, we have those to add to Matt's list, and I appreciate what he said, mea culpa. Get scientists together and we come up with lots of research questions.

But, the panel really took to heart the idea that we need to improve this assessment. We need to do it rapidly. So, we tried to prioritize recommendations that we thought would lead to the next best assessment effort.

So all five categories I present here we deemed of equal weight to the next assessment and then prioritized research recommendations within each category. Landings and effort, there needs to be increased effort to try to link up trip level catch-and-effort data.

We're now linking up effort and catch data on larger scales. And we could have very substantial biases within that. I think this occurs in the -- there is a nice discussion of this in the stock assessment as well. To do this, obviously stakeholder involvement would be critical, and perhaps this could be something that would be sponsored in a future ASMFC activity.

The panel was concerned about bait fisheries, that these fisheries may be less well monitored, so we thought that this should be highlighted in the future as well. Demographics, we thought that lengths should be routinely collected in landings, not always but routinely, and that always collected in fishery-independent surveys.

Age and growth studies should occur at regional index sites, not every river but sites that represent regions. These are going to be intensive efforts, but they could be efforts for long periods of time. We think this could be done efficiently in the near term.

And dealers now are very restricted in number. And because we have this bottleneck in terms of where eels go, it presents we think a great opportunity to do collaborative monitoring assessment activities using dealers -- I mean, cooperating with dealers.

Abundance indices, we wanted to emphasize that we think the ASMFC young-of-the-year indices, the glass eel data sets, these are very valuable early warning signals for changes in the distribution, range contraction of recruits coming in to our North American systems, but also an early warning signal for sustained recruitment, because, as I said, recruitment failure could be part of the domain of future possibilities.

And, of course, monitoring upstream-downstream passage; what goes up may not come back down. That's going to remain a very critical issue. Data analysis and assessment, we put high, high priority. We think this can be done in the short term on developing biological reference points for eels. We need to start the assessment process now.

Analyze data regionally; estimate index precision; and develop models appropriate to the eel life history. The last item is mortality and habitat. Marked recapture studies can be very efficiently conducted on eels.

Their homing behavior, certain phases of their life are easily marked. We recommend that mortality-related hydropower entrainment, impingement and turbine mortality continue to receive high priority.

There is this issue, of course, with carrying capacity. We heard at the panel review meeting that USGS is revisiting this. We certainly support that effort. And then we

have obviously contaminant issues, and there is this relatively new parasite. *Anguilla colacrisis* could be compromising the eventual reproduction of American eels and that should continue to be surveyed.

Well, our overall evaluation is that the terms of reference were incompletely addressed by the subcommittee. Additional work is needed for this benchmark assessment prior to its adoption for technical and management purposes.

We're trying to lay out here a series of issues that could be efficiently addressed in the near term. Number 1 is improved trend analysis. We asked for inclusion of a larger set of surveys, and guidance for that is given in our report.

We asked for quantitative analysis and diagnostic trends. We look for the GLM approach rather than the Z-score approach. These should be fairly easy revisions.

Issue 2 is the biological reference point. We recommend that the ASMFC adopts the ICES spawner-per-recruit approach. We recommend that critical discussion of other possible reference points occur in this assessment.

Issue 3, we'd like to see the ASPIC model moved into the formal assessment. Now, it was included as an exploratory analysis so it would be fair game to say that that's off limits for the panel review. Still, the panel agreed that had we not seen any exploratory analysis, we would have looked for a surplus production model and recommended that one occur.

We ask that the ASPIC model, even if it is not successfully run, that it is run, diagnostics and precision, it's reported, it's applied on a regional basis, and various sensitivity runs are given and that guidance

is provided in our report. Thank you for your attention.

CHAIRMAN COLVIN: Thank you, Dr. Secor, and I want to thank you and all the members of the peer review panel for your service and your advice. We appreciate your efforts. At this point let me open up the floor to questions for Dr. Cieri and Dr. Secor on their reports. Dennis.

SENATOR DENNIS DAMON: Thank you. Dr. Cieri, you had mentioned in your report, and I think it occurs on Page 80 in the handout that we received, that for most indices and observed trends they were decreasing save for the top one, which is the CPUE or the pounds per pot.

I think you also mentioned that there perhaps were a decrease in the number of pot fishermen. I am wondering why this is occurring, and specifically I ask if you observed any change in the pots? Is there a new way of trapping these eels that might lead to this increased catch per effort?

DR. CIERI: That information isn't exactly available whether or not -- I'm not sure that the pots have actually changed. What we think may have happened is that there were many part-time people eeling.

And as the abundance has declined over time, most of these part-time people have left the fishery, leaving only individuals that have -- basically, only the efficient individuals are left in the fishery, and therefore their catch-per-unit effort would go up.

It's interesting to note that that catch-per-unit effort index is heavily based in the Chesapeake Bay, so you have a CPUE index that's going up, meanwhile your fishery independent index is happening in the same

place and it's bottomed out.

CHAIRMAN COLVIN: Paul.

MR. PAUL DIODATI: I want to thank you both for excellent presentations, very informative. And although I appreciate that more information would be helpful to improve the assessment, it seems like it's just going to be a more precise characterization of the decline.

I don't think it's going to lead to anything other than that, but certainly worthwhile if we can get more information and improve our assessment techniques.

I guess my question is all the indices that you do look at are relative to fisheries' information, it seems, or research trawls or things of that nature. Are there any changes in the Sargasso Sea itself, harvest of sargassum, for instance, that may have changed habitat?

I know that the South Atlantic Fisheries Council did identify sargassum, during its review of essential fisheries habitat, an area of critical concern, a habitat area of critical concern and recommended prohibitions on harvest. I'm wondering how that might be related, if it's related at all, to the population trends we're seeing.

DR. CIERI: I guess I'll answer. I'm not sure that we know quantitatively or even qualitatively how those impacts affect eel population, if they even do. It's very difficult. It's a very big ocean. It's very difficult to collect eel larvae in that area and see how they utilize that particular habitat, again, if they do.

Looking at the Beaufort and New Jersey bridge tow data, I did take a look at the North Atlantic oscillation index, which is a

fancy way of basically looking at circulation and overall wind patterns in a concise index. I couldn't tease out any type of relationship. And Mark Sullivan who helped me on that particular analysis came to the same conclusion in his peer-reviewed work. So we're not quite sure how all of this stuff fits together. For now, the Sargasso Sea spawning and larval life is pretty much a big black box. It's only after they recruit into the estuaries that we can get a good handle on them and their availability.

MR. WILLIAM A. ADLER: Thank you, Mr. Chairman. Under the section in the stock assessment, you have research needs and stuff, and I notice that you mentioned natural mortality. I was just wondering if the natural mortality part of it would look at the predation by birds and other fish or if you have any statistics on that as being part of the dilemma. Have you got anything on that at all?

DR. CIERI: No. Pretty much, when it comes right down to it, you're talking about trying to figure out natural mortality. And there's a lot of things that can contribute to natural mortality including, for example, the parasite that David talked about.

There is also predation mortality by birds, by fish, and whatever. That requires extensive gut content analysis to do so, and it might be an important part. And there is some suggestion that bird predation, particularly by cormorants, might be very important in some locations, but its overall impact to the population is still relatively unknown.

MR. ADLER: All right, is that something that you would take into the equation or try to do as best you can?

DR. CIERI: If I got the data and the money.

DR. ADLER: Okay, fine, thank you.

DR. SECOR: Of course, you can use life history approaches to get at natural mortality rate and that's what the ICES assessment attempted to do. But even there, there is a complication because loss rates of yellow eels, for instance, will not only be natural mortality but also emigration as silver eels.

CHAIRMAN COLVIN: George.

MR. LAPOINTE: I, too, want to thank both panels for all the hard work they did. Although just in a bit of joking, the research list reminds me of a statement that came from P.J. O'Rourke that said, "Giving money and power to politicians is like giving whiskey and a fast car to young boys", and the research list seems similar to me, to be completely honest. I love you both to death but that's the way it is.

And it strikes me that the stock assessment committee did a lot of work, and knowing the people on it, tucking their work in with herring and with multi-species models and whatnot, and so I see the review panel's criticisms as constructive criticism and the need to move forward.

But for our board, this could be something we study for 20 years and we come back and we'll have the same dilemmas. And we need to kind of get, I think, on a two-track approach of doing better on the assessment but figuring out what we're going to do with what Paul accurately characterized as a general declining trend and what we do about that from the perspective in Maine of the elver fishery and the adult eel population, but importantly from the perspective of habitat.

I don't remember who mentioned dams

yesterday, but if you look at a picture of Maine with all the dams put in little red strikes, it looks like a chicken yard. There are just a lot of fish passage issues that we have to pay attention to as we move forward.

It's not all fisheries work or not all controlling fishing mortality as best we can. So it strikes me that's the dilemma the board is going to have of how do you take this picture that has been given to us, understanding it needs to be improved, and not wait until it's a really good picture before we can move forward.

CHAIRMAN COLVIN: Thanks, George, I'm sure we'll be coming back to that point kind of as we get to the conclusion of questions. Lance Stewart.

DR. LANCE STEWART: Thanks, Gordon. I just wondered if Matt had -- well, first of all some comments about Sargasso and the way I understand eel biology. They're in the Sargasso Sea latitude and longitude region, but they really spawn at deep depths.

And the leptocephalus don't really migrate right up to the grass mat. They are carried in many cases down in deep water currents. Some of the theory now is that major population is responsible for the European eel delivery, not via the Gulf Stream, but direct across the trade wind currents.

But, anyway, that's another issue. But what I'm trying to get to is a lot of the discussions I had with some of the early glass eel fishermen were trends in Gulf Stream wanderings, the early landfall of the first glass eel sets occurring up around Labrador and some of the long-term decadal capping trends of Greenland and the counter Ecuador current movement.

And I know it's kind of ridiculous to look back at those decadal trends, but that is something a lot of those traditional eel fishermen from the Maritime Provinces used as cues as to how their fishery was going to transpire.

And one other question I had, when I was looking at your data, particularly striking electroshocking densities, if you look at that -- and those are some of the more realistic because they have 100 meter square areas, 100 meter square areas were producing three eels per unit.

And I look at that as a fairly dense concentration of a major predator eel or any species. I just wondered if there are not more data like that from the stream survey records of your freshwater complements in the state that are doing traditional salmonid or lamp ray surveys in the Great Lakes.

I know they're done regularly with biocidal-type treatments of tributaries. So my question is, is there a whole other set of data that we as marine scientists are not taking into the fold?

DR. SECOR: Steve will take a shot at that one.

MR. GEPHARD: In looking at these data for the data workshop, we did identify that a number of states did have inland stream electrofishing data available. Connecticut is a good example. We had a state-wide stream survey.

The problem is these habitats were electrofished once. And so it gave the state agency a good picture of what fish were in those streams at that one time. But when looking at it for American eel, it was worthless for any trend analysis.

We just knew that on this particular day, when we electrofished, we had x number of eels. I sense except for maybe some research projects going on at some universities, that's what most of the inland electrofishing data is.

CHAIRMAN COLVIN: Pat.

MR. PATRICK AUGUSTINE: Thank you, Mr. Chairman. Based on Paul's comments and others that were made, is the board going to ask the technical committee to continue with their efforts of refining even above and beyond where we are now? They've done a tremendous amount of work so far.

I do know that the peer review panel came up with some very specific recommendations; and within the context of our financial capability, how many of those can they address reasonably? And could we ask that question, Mr. Chairman?

CHAIRMAN COLVIN: We could.

MR. AUGUSTINE: Will you, Mr. Chairman?

CHAIRMAN COLVIN: With some trepidation, we could look in the direction of Steve and Matt and ask them for advice on that. I do think the board does need, in all seriousness, to have some feedback from the technical committee and the stock assessment subcommittee on their ability to respond to the recommendations of the peer reviewers.

And it would be fair for them to say that they haven't yet had a chance to have the kind of dialogue with the members that they need in response to that. And that would be perfectly understandable if that was the response, but I'll let them speak for

themselves with that kind of up-front disclaimer.

DR. CIERI: You mean I'm not done?

MR. AUGUSTINE: No, better than that, we just hope you don't take George's example of an idea as to what you do with money as it becomes available.

DR. CIERI: Good point. In general, as suggested, you certainly can't commit other members of a technical committee or a subcommittee without at least talking with them on a time horizon.

I will say that some of the things that have been outlaid by the peer review are things that can be done in fairly short order. However, you also have to realize that there are assessments for other species that are also on a large priority for ASMFC and for the councils that will be occupying subcommittee members' time fairly regularly between now and at least the end of the summer, as you're well aware of.

With that said, there are some things that can be looked at. However, if we talk about going back out and looking for more data that are available, that requires a data workshop. More modeling techniques, that would probably require extensive sensitivity analysis, extensive tweaking of a model. You're looking at a year at least.

For some of the short-term things such as applying GLM, attempting to bring the data in the appendix into the main part of the document for full analyzation, that is something that can be done on a relatively short order.

However, the priorities for assessment teams in many other species are starting to stack up, and I believe this board might wish to

ask themselves whether or not you're going to get a different answer. And the answer to that question is, if the assessment does those things in the short term that I had mentioned, your answer is not going to change.

MR. AUGUSTINE: Response, Mr. Chairman.

CHAIRMAN COLVIN: Go ahead, Pat.

MR. AUGUSTINE: I didn't think we should be looking for a different answer. Both your initial comments, all the way through the document, you pointed us in a direction that we were on a pretty steep decline all over the place, and the peer review comments were similar.

I don't think we're looking for a cure all or another set of answers. It just seems to me that to have this a complete stand-alone document or set of documents, if you will, the two or three items that you mentioned, that could close the loop, so to speak, would adequately make both of these documents together be stand-alones. And then we'll move on with other assessments as we have to. Does that make sense?

DR. CIERI: Again, I don't want to commit either other members of the stock assessment subcommittee or technical committee or whatever. As far as this stock assessment subcommittee goes, with this presentation, we are officially dissolved; right?

With that said, of course, the same characters keep turning up in all the bad places. In general I think this is something that can be done. It needs to be charged, and this board needs to get a realistic answer on a timeline of when it can be completed.

CHAIRMAN COLVIN: Russell.

MR. RUSSELL DIZE??: Gordon, I'd like to give a very unscientific view of what happened to the eels in the Chesapeake Bay. Back in the '50s and the '60s and even before that, the eel was caught for bait for crabs on trot lines.

And probably Virginia, Maryland, Potomac River, that was the case. They didn't want the big eels because they weren't good for catching crabs so they were released, so we kept maintaining a big eel population.

In the late '60s and '70s, with the advent of the Japanese coming in here and paying big prices for live eels, the guys that were just doing it to catch bait for crabs went into catching live eels.

They not only could sell the large eels but they could sell the small eels. Now, we didn't have the glass eel but the small eel. So therefore we were taking all the eels that were available in the bay, all that they caught in their pots.

In the '50s and '60s the crabber had 25 or 50 eel pots that he maintained to get enough eels to catch crabs. And in the late '70s, '80s, '90s, we got eelers with 2,000 eel pots. Very few people doing it now, but with much bigger rigs.

So now we're down to, in our area of the bay probably down to maybe four or five eelers on the total part from, say, the upper bay to the Little Choptank. So the market for the eel and the price that was paid drove this to what I think has happened in our part of the bay to having such a scarce product.

And it's just evolved over that. The large eel was being put back in the population to spawn and go on and on. It's no longer. It's taken out and sold as a food product to

overseas. So, I mean, it's not scientific but that's basically what has happened in the center part of the Chesapeake Bay. Thank you.

CHAIRMAN COLVIN: Just a moment to reflect on where we are and what I think we need to do. I think first and foremost we need to consider action to accept the stock assessment report and the peer review panel report and take that formal action for the board. Pat.

**MR. AUGUSTINE: Mr. Chairman, I so move we accept the stock assessment report and the peer review panel report for American eel.**

CHAIRMAN COLVIN: Seconded by John Nelson. Discussion on the motion. Is there objection to the motion? Is there public comment on the motion? Yes, please, step to the microphone and identify yourself.

MR. CHARLES SENSIBA: Yes, thank you, Mr. Chairman Colvin and members of the American Eel Management Board. My name is Charles Sensiba. I am an attorney with the law firm of VanNess Feldman in Washington, D.C., and we provide legal counsel and representation to the Delaware Valley Fish Company on fisheries matters, including the Atlantic States Marine Fisheries Committee's current efforts to complete the American eel stock assessment report for peer review.

Delaware Valley appreciates this opportunity for public comment and would like to make a few quick points today to be included in the record of this matter. The first comment we would like to make is that Delaware Valley expresses its sincere appreciation to the board and ASMFC staff for the tremendous time and effort spent in preparing the stock assessment.

Delaware Valley, as many know, its principal chairs the advisory panel here and has actively participated throughout the process by attending meetings, identifying data sets, and lending its own expertise on the American eel, as we all strive to better our understanding of this unique, versatile and elusive fish species.

As its livelihood is dependent upon a healthy and vibrant fishery, both today and into the future, Delaware Valley would wholly support the adoption and implementation of reasonable, sensible management practices that are sustained by a public record that has been fully vetted through expert peer review and public comment. And we're seeing some of this today.

We are concerned, however, with some of the comments today suggesting that we should move forward now. Based upon the findings of the American eel stock assessment report for peer review and the conclusions of the terms of reference and advisory report to the American eel stock assessment, Delaware Valley believes it would be premature to initiate any changes to ASMFC's fish management plan for the American eel or implement any other changes in the management of this species without further detailed review.

In this regard, Delaware Valley encourages the board to recognize that the stock assessment report concludes that insufficient data prevented the committee from developing reference points or qualifying stock status and notes only that anecdotal information suggests that segments of the American eel population have declined in recent years.

The peer review report in turn found that the



available data were insufficient to support an assessment at the coast-wide level, that the primary methodology used in the stock assessment was non-quantitative and that the assessment failed to meet its terms of reference. And we've heard about that today.

Delaware Valley strongly believes that it would be inappropriate for the ASMFC to make any decision that would impact the lives and livelihoods of many people when the support for such action has not yet been identified. This cannot be a results-driven process.

Third, before the board uses this or any other stock assessment report as a decision-making document to support any changes in the management of the American eel, Delaware Valley believes that the board should fully utilize all known data sets and afford the public a meaningful opportunity to provide written comments to the record.

Proper utilization and analysis of all available data sets will not only strengthen the ASMFC's analysis but could well alleviate the premature concerns expressed by the committee in its stock assessment report regarding the decline of abundance, recruitment and the maintenance of a healthy and viable population of the American eel throughout its range. Thank you very much.

CHAIRMAN COLVIN: Thank you. Is there any other comment or discussion on the motion? Board members ready for the question? All in favor, please signify by saying aye; opposed, same sign. The motion carries. Are there abstentions or null votes to be recorded for the record?

Having accepted the reports, the board needs to consider where we go from here with the

information presented. Part of our discussion suggested that it might be appropriate to reach out to the members of the technical committee, in consultation with members of the stock assessment subcommittee and staff, to more fully discuss the peer review conclusions and recommendations, and in discussion with one another, both about the technical ramifications of those recommendations with respect to the assessment and any future work as well as the practical ramifications with respect to other responsibilities, available funds and opportunities to meet.

I'm wondering whether it would be the sense of the board that we request such action be done and that we receive back a report at our next meeting and a series of recommendations on how to proceed with respect to those findings and recommendations.

I don't see anybody objecting, but I don't see a lot of heads nodding, either. I don't need a motion; I'm just trying to get a sense as to whether the board is on board with that course of action. Now I'm seeing heads nodding. That's a little better. Thank you.

I don't want to be the only one here who is falling asleep today. Then I think that's how we need to proceed. It won't be Lydia, but we'll have a staff person who will help us get to that point. I know we can count on Bob to try to steer it.

The other issue that we need to face -- and I'll come back to George now, because he brought this point up a little while ago -- just let me see if I can retrace our steps a little bit. We had embarked on the development of a public information document, which went out to public hearing, citing information that was available to us to that

point on the status of eels and known information.

And, that public information document asked for public input on a variety of things, including some prospective additional management measures that might be undertaken by addendum, that might be undertaken by an amendment to the fishery management plan.

Kind of the consensus of public comment and the action of the board at the end of the day was to defer further consideration of all of those measures save one, which is in the Addendum I public review draft that we'll discuss later on this agenda, and to defer specifically until we had more information available by way of the stock assessment just reported on.

It strikes me, from the perspective of the chair, that the assessment, while the assessment has not given us proposed reference points and quantitative measures to date at least, that one might develop a traditional management approach, objectives, benchmarks to measure management success or to determine what management measures to implement, it does on the other hand in both the stock assessment itself and the peer review panel report have a fairly strong statement about the status, particularly of yellow eels.

And I think that that gives us some food for thought with respect to where we go from here. Now we don't have this as an action item today, and I don't necessarily think that we need to take action today. But I think that conclusion is one that the board ought to be mindful of, and I'll come back to George who originally brought the issue up.

I will open it up to some discussion about where the board members feel we ought to

go from here with respect to the public information document that we decided to put on the shelf until we got to this point in time while we're here. So with that kind of in the background, I'm going to ask George if he has anything further and maybe to kick off a little brief discussion of next steps.

MR. LAPOINTE: Thank you, Gordon. We've had a fair amount of conversation in Maine based on the information we have before us. And, if we bring the board back two years, it's when you brought the issue of this commission asking for the status review of the federal services because of this broad concern.

And when we move forward in a management perspective, it's great to have great stock assessments, and we all look for them. But even when we have good ones that are fat with data, like lobster and striped bass, we can still argue forever.

And so the stock assessment, from my perspective, is one key bit of information, and our job and the job of our technical folks is to grab other information, and I think there is enough there to move forward.

And from Maine's perspective, as has been identified a number of times, we've got one of the few remaining elver fisheries. And working with our legislature, they're actually talking about capping the elver fishery, not to cut the fishery off right now but to make sure that effort doesn't go higher.

You know, this is a common story, saying that if you have concerns, make sure that the effort doesn't go higher. Will we be successful in that; I don't know. Senator Damon and I will figure that out next week - - so to be precautionary in that regard. And the other thing that came up and it ties

back -- and Julie take note -- fish and habitat are tied together, the issue of hydropower and dams. We in Maine and you in other states have worked on the issue of upstream and downstream eel passage; and like most issues, we found out it's harder than we thought it was a decade ago, but we realize the importance of it.

And it may give us, this commission, a real toehold in the fish-habitat connection. I'm not underestimating for a second how difficult this will be particularly on downstream passage. Downstream passage eats up kilowatts, and every governor that I'm aware of is concerned about the cost of those kilowatts right now.

But I think that spending the time to look at the fish-habitat connection issue and then just what reasonable restrictions or caps on the fishery are good places to start, as well as asking the technical folks about prioritizing the research list to move ahead, but I don't think that we have the luxury of waiting for the data to get substantially better before we act.

CHAIRMAN COLVIN: Any other comments or opinions on that score? Jack Travelstead.

MR. JACK TRAVELSTEAD: I couldn't agree more with you and George on this issue. I wish we had this stock assessment and peer review a year ago; we'd be so much further ahead now. I think we need to do something and relatively quickly.

I think George is right in his suggestions. I think at a minimum we ought to be looking at capping some of these fisheries up and down the coast and take another look at all the other measures that were once a part of the addendum that is going to be before us shortly and bring those back, and let's look

at those again in May and see where we can go from there.

But I was very impressed with the work that the stock assessment committee has done and the peer review panel. I think it's pretty conclusive, in spite of its shortcomings. And it's certainly enough for me to wake up to the issue and suggest that we start moving forward.

CHAIRMAN COLVIN: John Nelson.

MR. JOHN I. NELSON: Thanks, Mr. Chairman. I don't disagree with either what George has said or others have said as far as moving ahead. I think, though, that we do need to have an evaluation, and that probably it should be at the next meeting, to see what is it that we can do.

George mentioned the downstream migration, and I can only say to you I've been working on that with one dam site and a hydroelectric -- notice I said dam site not hydroelectric. FERC is unbelievable to work with, if I can use that term.

I mean, this has been over ten years for us to try to get a downstream migration put in place. I don't think we should deceive ourselves as far as what we can do instantly for downstream migration. We need to have staff take a look at some of these things and say what is the process that we would need to use to deal with these.

And I think some of them we could do much more timely, and maybe capping is an area to look at, but I'd like to have staff review these measures and come back to us with what the sense is of what can be achieved in the near term and then what might be farther afield.

CHAIRMAN COLVIN: You know, I think

it might even be worth scheduling a direct presentation to the board from some experts on the passage issues, and that's something I'll talk to staff about.

But, for instance, it's my understanding that with respect to downstream passage, our human knowledge of how to make that work is very limited and it is a formidable challenge, certainly one that's being looked at very hard on the Saint Lawrence, to the tune of I think a \$20 or \$30 million research program to try to get them past Moses-Saunders, and it's a big job.

And perhaps that kind of a detailed presentation to the board on the nature of both upstream and downstream passage obstacles, the magnitude of the issue throughout the range and throughout the range of our management unit as well as the individual status and how we make these things happen or how we can and can't might be helpful. Wilson, did you want to comment on that point?

DR. WILSON LANEY: Yes, thank you, Mr. Chairman. I'm liking what I'm hearing, and I'm going to suggest to the board that one of the things the board might want to explore, especially with regard to the habitat issue that George mentioned, is an enhanced partnership with the federal agencies but also with your inland brethren in the inland fishery management agencies.

One thing that the states have just done is to go through this exercise of producing wildlife action plans -- at least that's what they're calling it in North Carolina and maybe the rest of you are as well -- that identifies lots of actions, I think, maybe more in a generic kind of way and not so much a specific kind of way.

But one thing that I think that you all have the opportunity to do here is maybe charge

the Habitat Committee to work with the Eel Committee, looking at some things that can be done. I have a tremendous number of ideas about what things can be done in terms of looking at blockages, identifying priorities, perhaps more for upstream passage.

And I agree with Gordon, the downstream passage issue is certainly problematic, but there is a lot that can be done in an upstream direction initially. And given the longevity of eels and the fact that it does take them a decade or so to mature in most cases, you may have a while to continue work on the downstream passage issue.

You were right, Gordon, about that large fund of dollars that I guess has been set aside as a result of the settlement with the New York Power Authority. That's being administered by the National Fish and Wildlife Foundation through the Fish and Wildlife Service.

June Dewise, in our Cortland Ecological Services Office, is in charge of that. I think it's a \$26 million fund. Some of us who were at the second American Eel Status Review Workshop met with June, and we have some ideas about doing some research.

Since many of us are actively engaged with different power companies in implementation of settlement agreements and also still actively negotiating additional settlement agreements, there is a tremendous opportunity there for ASMFC to have some of its management research needs met I think through that process.

I could go on and on for hours, but I know time is short and you don't want me to do that, so I would just suggest that this may be something you want to also charge the habitat committee to take a look at and see if

they can put something together that would be of benefit here.

CHAIRMAN COLVIN: Thanks, Wilson. John, did I see your hand?

MR. JOHN DUREN: Thank you, Mr. Chairman. I think some of us or several of us are thinking similarly. In the stock assessment report and also the peer review report, there was a long list of desirable research and further studies to conduct.

I have been thinking if we could select those things that would help us identify the effects of habitat versus fishing on the population of these eels, it would help us a lot to think about future management actions.

I don't know if the committees that did that work could identify that kind of work, but I think it would be very helpful to the management board if they could.

CHAIRMAN COLVIN: Thank you. One other thing I think I should mention to the board, I was recently made aware that there is a developing effort to have a bi-national sponsorship of a program to substantially enhance conservation of eels initiating from the Great Lakes/Saint Lawrence Basin and spreading from there through the Atlantic Coast of Canada and the United States.

The Great Lakes Fisheries Commission and the Province of Ontario, as you know, have been very active in advocating for eel conservation efforts. I understand there was recently a meeting in Ottawa at which both those entities advocated an expanded process that would become a bi-national effort.

And we do expect the sponsors of that to reach out to the Commission, probably either directly or through the Great Lakes

Fisheries Commission, and seek our participation as well, so I think we should anticipate that.

I know that the essence of that concern and the folks there are aware of our recent assessment and its status, and they are quite concerned, and justifiably so, with the status of the Lake Ontario and Saint Lawrence population.

But they also see an important need range-wide for collaborative conservation efforts. I think that that is something we also expect to hear from and will want to put front and center when we meet next. Roy.

MR. ROY MILLER: Thank you, Mr. Chairman. I have a little bit of a concern about some of these statements I've heard today concerning the need for a coast-wide conservation effort, that kind of thing.

I certainly wouldn't dispute and have no reason to dispute the indices showing drastic declines in the northern portion of the range of this animal, but I have to consider how we manage things locally in our jurisdiction.

And the one fishery-independent index that we have available to us, Matt characterized it as having no clear trend in the Delaware Trawl Survey, and that's a fairly long-term index. Now it may be that particular gear type isn't the best possible gear type to sample eels, and therefore it's not really a good indicator of trend; that's a possibility.

On the other hand, it's also possible there is no trend in the Delaware population. Therefore, I find myself on shaky ground in terms of embracing any move for additional conservation without some sort of indicator that the local population is in fact declining.

Not knowing how eel leptocephali sort

themselves out along the coast, I have to wonder if there is any relationship between relative low abundance of glass eels in the northern part of the range with low abundance or abundance at all in the Mid-Atlantic portion of the range.

They may be entirely independent. I don't know what determines the dynamics of how these animals sort themselves out when they return to their nursery areas up and down the coast. So, I would just urge that to be kept in mind before we jump into coast-wide recommendations for conservation measures to protect river systems certainly within the range of the eel, but perhaps not coastwide. Thank you.

CHAIRMAN COLVIN: Thanks, Roy. Matt, can you help us with that a little bit?

DR. CIERI: Yes, to get back to your point, it's Figure 28, Slide 23. That is actually the catch-per-unit effort observed in the VIMS trawl survey. So we do have measures both in the northern part of the range as well as the absolute center of the range of a decline in abundance of American eel.

So this is actually the same picture, if you could go to the slide before it, that's the Bay of Quinte in the northern part of the range. And then the next slide, that's the VIMS trawl survey.

So we're getting the same signal on yellow eel abundance both in the northern part of its range and in the central part of its range within a very, very short timeframe. So, there is some concern that this is a stock-wide phenomena.

Why the Delaware hasn't picked that up, I can't really tell you because we didn't have a chance to thoroughly analyze that data. We simply got a raw index from somebody,

and we didn't have a chance to actually tease through it the same way that the VIMS survey was done.

CHAIRMAN COLVIN: George.

MR. LAPOINTE: I don't mean this in a harsh way, but Roy's comments kind of sound like the discussions we heard about spawning grounds on striped bass 20 years ago, when I was in the Chesapeake Bay, about not having to pay attention to other areas.

I think that my understanding -- and I'll go back to my technical committee member -- is if you get the larger eels in the northern part of the population and the larger eels are females, so if we're losing the big mambo females and they all go out to the bit orgy in the Sargasso Sea, it is of stock-wide concern.

I mean, I think that's my understanding. And, in saying I think we need to move forward, I don't want to move forward rashly. You know, there were people who discussed in Maine an emergency closure of the fishery and I said not a chance and particularly until we figure out the habitat end of things.

But I think it's also something that -- and, again, I'm going to talk to my technical committee members just to make sure that we don't act rashly but we act. I mean, that's the tough spot we're in. And the data we have upon which to act is not great, but is there I think.

CHAIRMAN COLVIN: Let me offer a suggestion once again. We did have impaneled a plan development team who assisted staff and worked with the technical committee in the development of the public information document, and they were

available to us for further plan development work and presumably still are.

It would seem appropriate, given what I'm hearing in this conversation, to kind of reactivate the plan development team, to ask them to consult with the technical committee and to help us make some tangible progress, to come back to us with some suggestions on how we might proceed.

I think I heard a suggestion here to pull those shelved options back out, look at them, consider caps on the fishery or some measures to stabilize the fishery as well, if that wasn't thoroughly done, and any other measures that they might deem having sufficient merit for the board to begin to consider.

If that meets with general approval, and I'm sensing that it does, I think we'll work with staff to try to put together that effort along with the follow-up effort by the technical committee and try to get some fairly detailed reports and recommendations back to the board at the earliest opportunity. George.

MR. LAPOINTE: Would that include Wilson's suggestion about using the expertise of the Habitat Committee with the PDT to work on the habitat angles?

CHAIRMAN COLVIN: Yes, I think what we want to do is make sure we have sufficient kind of cross membership or access to experts, whether they're on the Habitat Committee or independent experts such as Wilson, himself, and other folks in the service to help us make sure we get that point incorporated into the effort.

Okay, well, that's a plan then and I think that's how we'll proceed, and we'll plan on going in that direction. Is there any further action or discussion anybody wants to have

on the stock assessment and where we go from here? A.C.

MR. A.C. CARPENTER: A moment ago John raised the question about fishing mortality or the impacts of habitat versus fishing; and in looking at the tables that are in here, it looks like there has been about an 80 percent decline in and access to historic areas.

Does the stock assessment committee or the technical committee have any kind of feel for how much of this decline can be related to fishing mortality as opposed to habitat problems? Is there anything out there? I know John asked about research, but do they have any kind of feel for it at this point in time?

DR. CIERI: I think the technical committee actually discussed that extensively and has some sort of a succinct answer.

MR. GEPHARD: No; is that succinct enough? The available data varies regionally. I know certain states or agencies are trying to look at habitat issues. For example, the Connecticut River Atlantic Salmon Commission is right now trying to implement an American eel plan which looks at the historical habitat versus the current habitat and trying to make conclusions about how much of that is available.

But certainly in New England, most of the barriers have been in place for many, many years. And while you could look at some hydro trends for downstream mortality, you wouldn't expect some of these habitat issues to have caused short-term declines.

But there are many parts of the range that I don't think these issues are even being looked at, so I think a lot more effort is

needed in this regard. It's not readily available.

CHAIRMAN COLVIN: Thank you. I'd like to get us moving on to the next item here to try to keep us on our original time allocation. In fact, if we can move a little more quickly, it would help the Shad and River Herring Board out, I know. So the next agenda item will be a discussion of Draft Addendum I. Lydia will review the public comment.

### **REVIEW OF PUBLIC COMMENT ON DRAFT ADDENDUM I**

MS. LYDIA MUNGER: Thank you, Mr. Chairman. Copies of Draft Addendum I were included on the CD-Rom that was circulated to board members.

And the public comment summary, the written public comment summary and the actual written comments themselves were included in the mailing, the supplemental materials for the management board. There are extra copies of those on the back table if anybody needs one.

I'm going to briefly give an overview of Draft Addendum I just to refresh everyone's memory. The board initiated Addendum I back in August of 2005 and approved that draft addendum for public comment in November.

The public comment period took place primarily in January of 2006. It ended February 7<sup>th</sup>, 2006. And board review and approval is taking place -- well, board review and potential approval is taking place at this meeting and then potentially with implementation of this addendum by the end of 2006.

Within the addendum, the statement of the problem notes that the fishery management

plan includes a requirement for licensing and reporting mechanisms. The stock assessment subcommittee, the technical committee, and the advisory panel have all recommended trip level reporting of catch and effort. You can actually add the peer review panel to that list.

This addendum was initially drafted to include all sectors of the fishery and was designed to obtain catch-and-effort information in standardized units. The intent behind the addendum was for annual reporting. The addendum notes that currently within the states there are a number of different license structures and levels of reporting taking place.

Bringing us to the reporting program in Addendum I, Option 1 -- and I'll discuss the splitting of Option 1 in a moment, but initially this was written as a specific eel permit, but the board changed it to a permit allowing the harvest of eels in that state with a mandatory reporting requirement.

Under Option 1, this would include trip level reporting and reporting would be a condition of permit renewal. It was noted under this option that a large portion of eel landings do come from inland waters, and implementation of this addendum would require cooperation with inland agencies.

The information looked for under this option includes soak time, number of units of gear fished and pounds landed by life stage. The board decided to split Option 1 into two sub-options, so this permit was split into Option 1A and 1B with Option 1A applying to the commercial sector and Option 1B applying to the recreational and -- excuse me, that should say personal, not person -- personal use sectors. So comments will reflect these sub-options.



And then Option 2 under the reporting program entails dealer permit with mandatory reporting, reporting of all purchases. And it was noted that this would provide an important validation of catch-and-effort data, although that dealer reporting alone may not necessarily provide an accurate measure of effort, but that this would also capture the cash market that is thought to exist on a small scale.

And it should be noted that the board can approve any and/or all of these options, so approval of one option does not preclude approval of another option. And unless there are questions from the board, I can move on to the public comment summary.

As I stated earlier, the comment summaries were circulated in the supplemental materials. There were eleven public hearings that took place throughout January 2006. I'll go through the public hearings and then briefly summarize the written comments and then open the floor for questions.

So the first hearing took place in West Boothbay Harbor, Maine. Three members of the public were in attendance. There is a table on the first inside page of the public comment summary that lists how many people at each hearing were in favor of each option.

And at the hearing in Maine, there were two in favor of Option 1A, which is the commercial permit with mandatory reporting. One person was in favor of implementing both Options 1A and 1B, which is the commercial, recreational and personal use permit. And then Option 2 one person was in favor.

Additional comments in Maine, it was noted that Maine has commercial harvester

reporting for all but the elver harvesters; that fishermen have no means to weigh their catch daily or to split daily harvest by gear type, so fulfilling this part of the requirement would be difficult; and that there is a potential perhaps to estimate the percentage of weekly landings obtained on a given day.

The second hearing took place in Gloucester, Massachusetts. There was one representative of the National Marine Fisheries Service in attendance but no other members of the public. The suggestion here was to apply Option 1B only to recreational fishermen who use pots to obtain eels, so Option 1B would not apply to hook-and-line anglers.

The third hearing took place in Palatka, Florida, on January 9<sup>th</sup>. There were five members of the public in attendance. One person was in favor of implementing both Options 1A and 1B. And there were two in favor of implementing all the options within the addendum.

It was thought that recreational permit and reporting should be specified for directed recreational fishery only. It was noted that many recreational fishermen catch eels incidentally. And there was a question regarding the requirements for dealers that operate in multiple states.

They requested that the board clarify which state would be responsible for issuing the permit and receiving the reports. In other words, would a dealer operating in multiple states have to have a permit and report in all those states or just their home state?

Other comments, it was noted that Florida also has eel landings from the Gulf of Mexico so that portion would essentially be required to be reported under this

addendum.

And the question was asked whether the board could investigate the possibility of some sort of minimum participation threshold to trigger the reporting requirement, either on an individual or a state basis.

So if, for instance, a state was de minimis, would it have to comply with this requirement; or, if an individual harvested a very small amount of eel, would they have to comply with this requirement?

No members of the public attended the hearing in Newport News, Virginia, on January 10<sup>th</sup>. There were eight members of the public in attendance at the PRFC meeting in Colonial Beach, Virginia. There were six in favor of implementing Options 1A and 1B and six in favor of implementing Option 2.

In Washington, North Carolina, on January 12<sup>th</sup> there were seven members in attendance, seven members of the public. For Option 1 there were six in favor of keeping the status quo, so the existing reporting requirements, and four in favor of Option 2.

It was pointed out that the North Carolina trip ticket program is a dealer-reporting system incorporating almost all of the information requested by Draft Addendum I.

It was pointed out at the hearing that a separate harvester report was probably not needed and that information is actually most accurately obtained from the dealers because the dealers are the ones, at least in North Carolina, who obtain the weight information, and they actually get all that information from the harvesters.

It was also pointed out that life stages, if the addendum will require reporting by life stage, that the life stage has to be clearly defined so that harvesters and dealers know what they're supposed to be reporting.

In Dover, Delaware, on January 17<sup>th</sup> there were six members of the public in attendance. It was pointed out that Delaware currently collects effort data on a monthly basis and this should be sufficient to satisfy the requirements of Addendum I. It was pointed out that harvesters can actually record daily trip details such as number of pots and soak time and report that information monthly, so perhaps their reports wouldn't need to be submitted daily. And one member of the public pointed out that daily weighing of catch would actually stress the animals and add to mortality.

In Narragansett, Rhode Island, on January 18<sup>th</sup> there were 14 members of the public in attendance. Three of those people were in favor of Option 1A and one was in favor of Option 1B as long as there were no fees attached to that option. And three were in favor of Option 2.

Comments include that the reporting system needs to capture direct sales from fishermen to bait shops and from fishermen to charter boats. And it was also pointed out that poundage is currently collected but not life stage information in Rhode Island.

In East Setauket, New York, on January 23<sup>rd</sup> there were ten members of the public in attendance. Nine of those were in favor of Option 1A, which is the commercial reporting requirement.

And one was in favor of Option 1B, which is the recreational and personal use requirement, although that person did have concerns about the enforceability of this

option. And it was pointed out that New York already has mandatory dealer reporting in place.

In Annapolis, Maryland, on January 24<sup>th</sup> there was one member of the public in attendance. That person was in favor of implementing Option 1A and pointed out that Maryland does already have a commercial reporting requirement. In addition, this person was in favor of consistent reporting by each state.

And in Pomona, New Jersey, on January 25<sup>th</sup> there were six members of the public in attendance. Three were in favor of Option 1A, and there was consensus amongst the group that Options 1B and Option 2 would not work.

There was a request that the board clearly define the term “dealer” in this addendum so that that was clearly understandable by the public. And there was concern about the ability to validate landings and sales using a two-ticket system, so concerns that the harvester reports and dealer reports may not necessarily match up due to various factors.

Written public comments were accepted through February 7<sup>th</sup>, 2006, and there were 25 written comments received. Those are included in the packet. There were a number of general comments, and I tried to summarize those to the best of my ability here. There is a more detailed summary in the written comment summary.

Six comments asked for the withdrawal of Addendum I and asked for the adoption of an emergency measure banning the possession of American eel. Two comments supported adoption of all three options in Addendum I.

And one comment pointed out that sub-

sampling of the fishery and/or composite trip data may be more obtainable than daily trip level catch-and-effort information and might still achieve the goals of helping with the stock assessment.

Another comment asked that fishermen and dealers be involved in the design of any reporting programs. Other general comments, it was pointed out that eels should be managed as part of a multi-species group. Other comments asked for concentration on habitat restoration.

Suggestions were made to conduct more research on lifecycle range and habitat for American eel. And other comments called for a development of additional changes to the fishery management plan.

Other comments asked a variety of things, including considering limited use of eels as bait, elimination of catch of small eels, and requiring the release of eels over a certain weight.

Under Option 1 some of the written comments pointed out that it is impractical to weigh each day’s catch and that the requirements under Option 1 would create a burden for part-time and seasonal fishermen.

Other comments pointed out that the method used is actually a greater factor than CPUE in determining abundance. And suggestions were included to make requirements realistic to reflect the way the fishery is conducted. One written comment was in favor of adopting both Options 1A and 1B and one comment did not recommend Option 1.

Under Option 1A comments included suggestions to have commercial harvesters submit records of catches. One comment stated that requiring a specific eel permit would be overly burdensome to commercial

fishermen, and that there was great potential for non-reporting and submission of inaccurate data under this requirement. And one comment also pointed out that monitoring would require additional funds that may not be available in all states.

For Option 1B comments reflected that the personal use group should be exempted, and that for the recreational sector one annual report of just the total eels caught should be submitted if any reporting were to be required.

Other comments stated that recreational licenses should be required in the states where eels inhabit both fresh and brackish waters, and the comment listed the states. Another comment thought that Option 1B was impracticable, costly and unrealistic to enforce. And other comments pointed out that the number of eels caught by recreational anglers is small.

And then with Option 2 on the written public comment, actually one comment letter reflected that surveys show that a majority of fish dealers in North Carolina do not support having more questions added to the trip ticket to collect information such as effort.

And another comment reflected that changing the trip ticket in North Carolina would require changing the reporting software as well as the database that holds the information which would place a burden on dealers and on the North Carolina Division of Marine Fisheries. There was one comment received in favor of Option 2. That concludes the public comment summary. At this time I will take any questions.

CHAIRMAN COLVIN: Thanks, Lydia. I wonder if it would be helpful if you put back

up the slide that you had the options summarized on. Are there any questions about the comments? I thought that was a very thorough and helpful presentation.

It's therefore before the board to take action with respect to the final adoption or non-adoption of Addendum 1. I will suggest that we look at the two options consecutively, beginning with Option 1.

I would point out that it would appear to the chair that with respect to Option 1, we have the alternative of no action, Option 1A or 1B alone or Options 1A and 1B both. Is there a motion or a recommendation at this time? Pat Augustine.

**MR. PATRICK AUGUSTINE: I would move that we approve Addendum I to the ISFMP for American eel with Option 1A and Option 2, and then I'd like to comment on it after.**

CHAIRMAN COLVIN: So Pat, you're actually proposing a motion that goes to the adoption of Options 1A and Option 2?

MR. AUGUSTINE: Yes, Mr. Chairman.

CHAIRMAN COLVIN: You've plunged right on ahead of the chairman and wrapped it all up in one big motion. You know, you've never done that to me before, Patrick.

MR. AUGUSTINE: Yes, Mr. Chairman, that's the way we like to operate.

CHAIRMAN COLVIN: The chair will recognize the motion and call for a second. Seconded by Eric Smith. Discussion on the motion. Jack Travelstead.

MR. TRAVELSTEAD: I have a question. It seemed to me, in going through the public

comment and listening to the programs that the various states have, some have fishermen reporting at the trip level, others have dealer reporting that apparently gets them trip level information.

And it just seems to me what's the problem with letting the state decide which of those works best for them? As long as it's providing the trip level information that we need, what difference does it make whether it's the fishermen reporting or the dealer reporting? I guess that's a question for the – - am I missing something – a question for the technical committee.

DR. CIERI: The difficulty with dealer reporting is in some respects you don't know exactly where that eel came from. If you have a harvester report, that guy is the one that's got the gear. He's the one that put the pots in the water. He's the one that yanked the eels out of the water.

If you get it from a dealer, all you're getting is what the dealer said was told to him by that particular harvester. On the flip side, if you used only harvester reporting, you're not going to get a good handle on the economic basis; for example, how much the eel was sold for and what it was used for. So there are tradeoffs between harvester and dealer reporting. That's why in many fisheries in the Northeast both are required.

CHAIRMAN COLVIN: Pres Pate.

MR. PRESTON P. PATE, JR.: Thank you, Gordon. I think Jack has raised a very good question. I think we're in a position where we're trying to design states' reporting programs around the needs for this one fishery which can be very disruptive to the programs that some states have had in for a number of years that have proven to be very successful, North Carolina being one very notable, and I like to think a leader in the

development of our trip ticket program to the extent that it's, I won't say universally supported, but certainly receives a great deal of support from the dealers and the fishermen because of the benefits that they see now are accruing to them, both in our management programs and for reasons that were unexpected at the time that we put it in place.

The comments that were submitted by us and were heard at the public hearing about changing the program to meet the specific needs of the eel plan, and therefore becoming disruptive of something that we've had in place, are real in the sense that it could be a reason for less participation or submitting of less accurate information.

In all due respects to the point that Matt just made, whether the fishermen is reporting it himself or if the dealer is reporting the information that is given to him by the fisherman, if the fisherman doesn't want you to know where he's been catching his eels, he's not going to tell you himself.

I think that getting that information from the dealer is just as accurate as getting it from the fisherman. I feel like that the program that we have in place adequately satisfies the needs of the plan, and it should be left up to the states, as Jack suggested, to make that selection.

CHAIRMAN COLVIN: A.C.

**MR. CARPENTER:** Mr. Chairman, I think I want to at least begin to amend this motion by removing the requirement that the eel harvest be reported by life stage at least until and unless the technical committee can provide a definition and examples of how to tell the difference between a silver eel and a yellow eel that can be passed around to this table and get a 95 percent return or a test of

us.

Can we tell the difference between the two with any kind of confidence? Otherwise, it's a burdensome situation. Now, if you want to tell the difference between elvers and yellow eels, you may have a shot at it.

**But I don't know that we can define the difference between silver and yellow eels with enough confidence to be able to have it become a useful bit of information so I would move to amend the motion, striking the requirement for the life stage reporting.**

CHAIRMAN COLVIN: Before I call for a second, A.C., I think you posed a question to the technical committee. I think they'd like to respond to your question, and then we'll see where we go from there.

MR. GEPHARD: We recognize the difficulty in distinguishing yellows and silvers, and I suspect that we would be unable to come up with a totally satisfactory guide for that distinction. However, I don't believe that would be a reason to throw the baby out with the bathwater, so to speak.

I think that the distinction between elver and yellow eel certainly can be made and is certainly valuable. I'd hate to see this whole reporting scheme thrown out because of the problem with silver eels.

Keep in mind that some states still allow glass eel, too. We don't want to blur all these distinctions. I think we need to maintain the distinctions that we're able to do. We also have a directed silver eel fishery in two states.

I would argue that the life stage reporting needs to be done. And if certain jurisdictions, there are people potting or fishing yellow eels in some other ways, and

if they cannot make the distinction between yellow and silver eels, so be it, we accept that vagueness.

CHAIRMAN COLVIN: Is there a second to the motion to amend? Is that a second, Eric? It's seconded by Eric Smith. Discussion on the motion to amend? Eric Smith.

MR. ERIC SMITH: Very literally, on the motion to amend only, reserving opportunity to comment on the main motion later, I think the point made about the biological ability to deal with these things, we need to ease into.

That part of it would be much better, in my mind, to be a recommendation that states work on moving toward that standard. But if we make it mandatory and then find out after the fact that it's just done with such a high level of uncertainty that it causes confusion and frustration among the people who are reporting, and potentially law enforcement officers, we haven't served ourselves very well.

So I kind of agree with A.C., that amount of differentiation might be a problem. We had the same problem with the skate fishery in New England, and we just had to ease into it because you couldn't identify seven species, the differences. Thank you.

CHAIRMAN COLVIN: I would point out that if the addendum passes, the states will need to submit implementation plans. That's something we should bear in mind not just in terms of our deliberation on this amendment, but also on the main motion and some of the comments that have been made.

And when we get back there, I'm going to start asking people to put their comments in the form, as A.C. kindly did, of an amendment so that we move towards action.

Is there discussion on the amendment only? Bill.

MR. ADLER: If the motion itself said 1A and 2, I just read 1A and 2. I didn't see where is -- where are you getting the part about the life cycles? It's not even listed there, is it?

CHAIRMAN COLVIN: That's part of the preamble dialogue under Option 1. Yes, it is there. Jack Travelstead.

MR. TRAVELSTEAD: Well, that was the same comment I was going to bring up, is that provision even a mandatory element of the addendum or is it just there as a suggestion? Other than that, it seems to me there is a compromise in here somewhere between what A.C. wants and what the technical committee has recommended.

I mean, obviously we want all the information that we can get as easily as possible. I think it's pretty easy to get information on elvers versus other eels. And in some states apparently it's going to be easier to get information on the silver eel fishery.

I just wonder if we couldn't live with some language that encourages the states to adopt as life-stage specific information as possible.

CHAIRMAN COLVIN: A.C.

MR. CARPENTER: I don't have a problem with that, but I think we have to have a standard definition supplied by the technical committee of what those life stages and how they are identified are so that the folks in Maine and the folks in Florida are both using the same terms, the same description for a yellow eel versus an elver versus a glass eel versus a silver eel.

And lacking that definition and the ability for the general public to recognize and differentiate it, you're just adding confusion to an already -- you're adding a burden that I don't think we can enforce on ourselves.

CHAIRMAN COLVIN: Further discussion on the motion to amend? Gil.

MR. GIL McRAE: Thank you, Mr. Chairman. Would staff mind pointing out exactly where in the documentation the reference to specific life-stage reporting occurs?

MS. MUNGER: On Page 6 of the document, after the first -- like the end of that half a paragraph, it says the 2000 FMP requires states to report the following information each year, for the commercial fishery: estimates of directed harvest by month, by region, as defined by the states.

And then the next item is pounds landed by life stage and gear type. This is actually already a requirement of the FMP and is actually just being added to the addendum to carry that over.

MR. McRAE: A follow up, Mr. Chairman. Life stage is not presently defined, though, is it? Is that true?

MR. GEPHARD: There is a definition but I recognize that definition is inadequate. And what we can say is that the technical committee will go back to the drawing board and sharpen the pencil and come up with better definitions of the life phase.

CHAIRMAN COLVIN: Eric.

MR. SMITH: I think I got hoisted a little bit on the apprehension we all feel about it being a compliance criteria versus a required provision. If this is a required provision of a

data collection module of this addendum that becomes required but in reality it's guidance to the states to do the best they can with the advice they have, I'm pretty comfortable with it, and I'd almost withdraw my second if A.C. is so inclined.

However, if the next step is to say and you're out of compliance if you don't do this, then I have a real problem and the motion to amend is valid. So, if somebody can ease my pain with that, we can maybe get off the dime on it.

CHAIRMAN COLVIN: Well, you know, we're supposed to be reporting this now as a compliance requirement. I'm not sure that anybody has been found out of compliance yet if they've confused one life stage for another or haven't completely segregated their life stages in their reporting.

I'll just kind of point that out for background. What I'm looking for at this stage is either a perfection to the amendment or a willingness to take the question on it. Pat.

MR. AUGUSTINE: Thank you, Mr. Chairman. In view of the fact we don't have clear definitions of the various life stages, wouldn't it be more appropriate to change the word "requirement" to "recommend"? This is an addendum; and by the time we get the definition out and ready for the folks that are dealers and dealing with all this, maybe that will soften the blow.

And there is no question, once we go through at least the first year cycle of this and see what the value of what we're doing is, maybe it's then time to come back with a window of some sort of a year or two, whatever it happens to be, and make it a requirement.

At this point in time, we're trying to initiate a better reporting system that's going to help us make our next series a very serious definition. So, A.C., if you would consider the word "recommendation" for this go around in place of requirement, it would be helpful.

CHAIRMAN COLVIN: A.C.

MR. CARPENTER: Well, I think before we started talking about Addendum I, we had agreed to bring a large number of other items that were originally being talked about for I take it will be an Addendum II.

Perhaps this could be folded into the future Addendum II, and by that point we can have the clear definitions available, and we simply strike it from Addendum I. I'm not arguing against reporting it that way.

What I'm arguing for is definitions that are useable and can be recognized by the industry and by the people that need to. And I think that we have an option coming up here very shortly with reconsideration of a number of other issues in a future addendum that we could address this at that point. I'm going to not withdraw my motion and call for the question.

CHAIRMAN COLVIN: Is there any further comment on the motion? John.

MR. NELSON: Thanks, Mr. Chairman. I'm not sure that just removing it from an addendum does anything to this particular requirement if it's in the FMP, and therefore the motion to amend probably is moot.

But, I think the point is well taken by the motion and that is that we do not have good definitions. I thought I heard from the technical committee that they were going to provide a better definition for us all to use,



and my sense would be that they are going to present that to us at a future meeting; and that once we approve those definitions, that's what we would use for our reporting system in the future.

And so if that's the intent and if that satisfies A.C., I think the motion should be withdrawn and we would proceed on that approach for the future.

CHAIRMAN COLVIN: Well, A.C. isn't raising his hand, so I'm going to suggest that the board take the question. Do you need time to caucus? Are we all ready to vote? All in favor, please signify by raising your right hand; opposed, same sign; abstentions; null votes. The motion fails.

What I'd like to do now is to return to the issues that were under discussion before this amendment was brought up. Let me ask -- I thought a couple of good points there were made by Pres. I'm wondering whether any of the members can conceive of an amended motion or a substitute motion that might help us get from here to there. Roy.

MR. MILLER: Thank you, Mr. Chairman, that's exactly what I was thinking of. Specifically, my objective would be to allow states and jurisdictions to use either Option 1A or Option 2 in order to generate trip level reports.

If A.C. is comfortable with something like that, then I could offer an amendment to that motion. In other words, the state has the option of using either 1A or Option 2 in order to generate the trip level reports that everyone seems to want.

CHAIRMAN COLVIN: And presumably the state's implementation plan for the addendum would address the particulars of how they're going to acquire the data that's contemplated by the addendum under that

approach.

MR. MILLER: Yes.

CHAIRMAN COLVIN: I would certainly think that as a substitute motion that might be worth considering, Roy.

**MR. MILLER: Could we amend the motion to substitute an or between 1A and Option 2 and strike the and? Would that do it?**

**CHAIRMAN COLVIN: And indicate further I think it would be helpful if the substitute motion further indicated that the states' implementation plan would address how the necessary data would be provided.**

MR. MILLER: Yes, I'm comfortable with that.

CHAIRMAN COLVIN: Mr. Miller has offered a substitute motion. Is there a second to the substitute motion? John Nelson. Discussion on the substitute motion. Pat.

MR. AUGUSTINE: Thank you, Mr. Chairman. Does that adequately address the state of North Carolina's concern? I think Pres was very concerned about what this would do if we went forward with it. Now, will this take care of your reporting so he doesn't have to make major changes to his data collection or reporting?

CHAIRMAN COLVIN: My sense is that it is intended to, but I'm sure Pres will tell us if it doesn't.

MR. PATE: Yes, thank you, Gordon, and actually I need to ask staff a question before I can answer that adequately. It's a matter of terminology as much as anything else.

And there are some mixing of terms in the explanation of what Option 1 is intended to achieve, and the two terms are license and permit.

The Option 1A and 1B and 2 says develop a permit, but up in the second paragraph in the text of discussing the Option 1 it says, "One important consideration for the ASMFC in implementation of a license and reporting program for American eel" et cetera, et cetera, et cetera.

There is an important distinction in North Carolina between permits and licenses. All of our fishermen are licensed, and all the fishermen have to report at a trip level all their activities.

Our concern is that if the intent is to layer a permit on top of that license to get information that we're already getting, that's redundant, unnecessarily burdensome, and won't improve our reporting requirement one bit.

If it's possible that the current license that we have and the reporting requirements that go along with that license meet the intent of what is being considered in here as a permit, then my concerns are reasonably satisfied.

CHAIRMAN COLVIN: It would be the chair's opinion that it does with this caveat - - and I believe that one of the issues that it was of interest to folks in the development of the addendum is that what may be the permitting and reporting requirements on the coast may not be the permitting and reporting requirements in our inland waters, and that there was a desire to assure that we had programs that were range-wide in our states.

So, with that caveat, I don't think that it's important that there is a distinction between

permits and extant licenses. I think that would be part of your implementation plan.

On the other hand, if you didn't have a permit or a license system in effect up into the headwaters, that there would be some necessity to consider that because we need to identify who is taking the animals and who is reporting the taking. Eric.

MR. SMITH: On this motion now I have a better sense of where Pres Pate's concern is, and I actually agree with a lot of it because it reminds me you always have to read underneath the staple on these things.

And when I did that, I reminded myself that this says specific eel permit and then it said mandatory reporting. And if you recall three months or six months ago, that was a concern I had at the time, and I'll make it again for the record.

I guess, very much like North Carolina, we have kind of an omnibus reporting system. You have to have a commercial license to take and sell anything and you have to report all of it. We don't want another system that is eel specific, and that's what under the staple really says.

So, I guess my support for this motion now becomes it's Option 1A or Option 2, but not the meat of the overlying Option 1 if it means that you have to adopt an eel-specific permit and eel-specific reporting.

I mean, let's get the data but let's not do it in a redundant fashion. I'm not quite sure what to do with this motion because it is already a substitute, but I think my support needs to be conditioned on the fact that it does not require eel-specific permitting or reporting.

CHAIRMAN COLVIN: Lydia is going to address that.

MS. MUNGER: Thank you, Mr. Chairman. What I'll first point out, Eric, is that the text says that harvesters would be required to obtain a permit allowing individuals to harvest eels. That text was changed to reflect your concern after the last board meeting.

The PDT neglected, in error, to delete the word "specific" from eel permit with mandatory reporting under the title. And if what I'm hearing is the board wishes to have that changed, if that is the consensus of the board, the PDT will delete that word from the addendum.

MR. SMITH: It solves most of my problem, but, frankly, I think you're on the right track. It's what that header line really says. What we really want to say is you want permitting and reporting that covers the eel fisheries.

It's not a specific eel permit, either. I mean, you could take out "specific", but it still says it's an eel permit. What you really want is permitting and reporting that track participation in the eel fishery.

CHAIRMAN COLVIN: That's correct, however you get to it, and not just in your marine waters. And, again, I come back to that point.

MR. SMITH: That's also correct, yes.

CHAIRMAN COLVIN: Gene.

DR. EUGENE KRAY: Thank you, Mr. Chairman. Could I ask a point of clarification. In Pennsylvania we have no commercial fishery for eels. And as far as we know, we have one dealer. What would be our reporting requirements under this scenario?

CHAIRMAN COLVIN: The consensus here is that Option 2 would be applicable to any licensed dealer in the state in that instance. You wouldn't have the option of going to one, you have no fishermen.

Is there any further discussion? Is there any public comment on the motion? Eric, I see you writing. Do you have any specific change you want to offer in response to your comment?

**Okay, we're going to act then on the substitute motion, which I will now read. I move to substitute to approve Addendum I to the American Eel FMP with the states implementing either Option 1A or Option 2 to collect the data detailed in Draft Addendum I. State implementation plans should specify how the required information is to be obtained.**

Do you need time to caucus? Seeing nobody indicating that they need time to caucus, we'll take the motion to substitute. All in favor, please signify by raising your right hand; opposed, same sign; abstentions; null votes. The motion carries. Having accepted the substitute motion, we'll now vote on the main motion as substituted for. John.

MR. NELSON: Before we do that vote, Mr. Chairman, just to make sure for the record the point that A.C. had brought up about the life stages, I think my sense was that the technical committee is going to come up with definitions, provide that to the board for consideration before we have to start reporting by life stages. That would be approved by the board.

CHAIRMAN COLVIN: Except that we already have to report by life stages, but

why beat that horse again. Okay, sorry, I just had to do that.

MR. NELSON: That's all right.

CHAIRMAN COLVIN: We'll now take the motion as substituted for, which is I move to approve Addendum I to the American Eel FMP with the states implementing either Option 1A or Option 2 to collect the data detailed in the Draft Addendum I. State implementation plans should specify how the required information is to be obtained.

Is there a need to caucus? It looks like we're ready for the question. All in favor, please signify by raising your right hand; opposed, same sign; one; null votes; abstentions. The motion carries.

Is there any further action to come before the board with respect to Addendum I? Yes, implementation. A.C., you have the con. Mr. Vice Chairman, you have the con.

VICE CHAIRMAN CARPENTER: Thank you very much.

CHAIRMAN COLVIN: That will teach you to take me down a detour.

MS. MUNGER: Thank you, Mr. Vice Chairman. The remaining action before the board with respect to Addendum I is selection of an implementation timeline. So, with the addendum being approved in February 2006, the board will need to select a date that implementation proposals are to be handed in to the Commission and also a final implementation date.

And then obviously, in between when the implementation proposals are submitted and the final implementation, there will be technical committee review of proposals. The board has requested technical committee definition of life stages. All that

information will be reviewed before the final implementation date.

VICE CHAIRMAN CARPENTER: Thank you. Anybody have a suggested schedule for the implementation date? And I see one, go ahead.

MR. LAPOINTE: I'm curious about other board members. How many states will need to go to their legislatures to make changes to this? I haven't reviewed it specifically for Maine, but I think we are one, so that will require that we submit legislation this fall. I mean, it wouldn't go through the legislature until next year.

VICE CHAIRMAN CARPENTER: Are there any other states in the same situation? I'm seeing New Jersey. Tom.

MR. TOM McCLOY: Thank you. We don't have to go to the legislature, but we're going to have to go through the regulatory process so the earliest we would have this in place would be January 1st.

VICE CHAIRMAN CARPENTER: Any other states? Delaware, Roy.

MR. MILLER: We also would have to go through the regulatory process. It depends on the definition of trip level reporting. Under the monthly reports that are now required in Delaware, if they have to report pounds landed per day, yes, we'll have to do a regulation. But if there is some flexibility, such as a report being generated whenever the buyers come by to pick up eels, then perhaps not.

VICE CHAIRMAN CARPENTER: I would think that if the report is generated when the buyers pick the eels up and they're able to document how many days they fished to acquire that, I'm kind of looking at the

technical committee here to see if that's going to be a sufficient level because eelers don't normally weigh out until they sell.

DR. CIERI: Yes, basically, I mean, we don't care if we get the report on a monthly basis or even seasonally. I mean, that's fine as long as we get some sort of trip level reporting and a level of effort, you know, how many pot days did you fish to get that many eels in a particular location? Do you see what I'm getting at?

VICE CHAIRMAN CARPENTER: Yes, I think that would address Roy's concern, but we still have two states that are looking at least a January 1 of 2007. Do you know if Maine can meet that deadline?

SENATOR DENNIS DAMON: It would depend on whether or not it has to go through the legislature, and that's what the commissioner is checking on now, but if it does have to go through the legislature, we couldn't meet that deadline. The deadline would have to be probably July 1 of '07.

VICE CHAIRMAN CARPENTER: Yes, sir.

MR. ROBERT H. BOYLES, JR.: Thank you, Mr. Chairman, just a questions perhaps out of my ignorance. The fishery in South Carolina is a relatively small one, and I'd just like for staff to perhaps to give us some guidance on confidentiality issues if we have fewer than three harvesters.

VICE CHAIRMAN CARPENTER: Let me ask the staff or the technical committee. Bob, do you have an answer here?

MR. ROBERT E. BEAL: I don't have a complete answer right off the top of my head. I think we can look at the ACCSP standards and see what they do on some of

the smaller states or states with a small number of participants in their fishery.

We can get back to the board at the May meeting because I know we have staff work that needs to be done prior to the May meeting. We can put that on the list.

VICE CHAIRMAN CARPENTER: Does that satisfy your curiosity until you get an answer to that? I think we're still back to the basic question of an implementation date. I see that George has returned.

MR. LAPOINTE: With no information.

VICE CHAIRMAN CARPENTER: I'm going to suggest that we at least start with a January 1 of 2007 implementation date as a starting point, allowing states that need to go to the legislature that are going to meet after that, maybe an additional six months, if that starts to get us moving in this direction. Is there someone ready to make a motion to that effect? George.

MR. LAPOINTE: I'll make that motion, and I was going to suggest something similar. For those of you on the Lobster Board, you will recall that with our most restrictive rule, there was an implementation date.

We got into this legislative fix and then there was a letter that said if you don't fix it, you know -- I mean, yes, we know you have to go to your legislature and if you don't fix it by date certain, then you're out of compliance, and so it embodies the concept that you just talked about, so I think that would work.

**So it would be move to set the implementation date for 1 January 2007 - - and should we roll in, what was the other part -- with the possibility that the states that need to go to the legislature**

**would have an implementation date or could have of 1 July 2007. And then state plans, should we make this a part of that as well?**

VICE CHAIRMAN CARPENTER: Yes, let me ask the technical committee how long it's going to take them to evaluate the plans. Is 90 days prior to the implementation date sufficient?

Staff suggests that we ask around the table how long it's going to take each of you to prepare an implementation plan; the idea being that if your plan is rejected, you're going to need time to go back and work on it again, and that may require additional time.

MR. LAPOINTE: It doesn't seem like the implementation plans are that big a deal so if we have them -- I mean, I was thinking I don't know if we're going to meet at the May meeting, and I don't want to suggest that we need an Eel Board meeting, but if you give people a couple of months, it seems like it would be sufficient. June 1, I mean, gives you three months. I see lots of head nodding.

VICE CHAIRMAN CARPENTER: Tom, go ahead.

MR. McCLOY: Actually, the sooner the better from our perspective, because we're going to have to sort of process through the regulatory process that specifies exactly what we're going to do.

We have a little bit of flexibility to change things, but if there is a major change in our plan, finding out in August is not going to help us because we're going to have to start the whole process over again.

VICE CHAIRMAN CARPENTER: Would the May meeting timeframe for submission

of plans be able to be accommodated, and that would give us ample opportunity to have it reviewed after that and react if there is need be at probably the annual meeting? So if you want to include that in your motion, it would be helpful.

MR. LAPOINTE: And another sentence, and it would be that **state plans to implement Addendum I would be due to the commission** -- I heard 1 May and 1 June -- **1 May 2006**. Now we need to get a second to the motion.

VICE CHAIRMAN CARPENTER: Do we have a second to the motion? Seconded by Bill Adler. Any discussion on the motion? Bob Beal.

MR. BEAL: Just a question; is the intent to have these submitted and reviewed by the technical committee and have the board able to respond to these at the May meeting?

VICE CHAIRMAN CARPENTER: No, I think the intent is to get them here in May. The technical committee would have through the summer, be available to report back at the August meeting, which would provide one more shot if anybody needed it before the first of January. Is everybody clear on that? Vince.

EXECUTIVE DIRECTOR JOHN V. O'SHEA: Thanks, Mr. Chairman. I'm not sure if this question is now or after you deal with this motion, but we have some, I guess, urgent information here from the stock assessment group.

And while I'm very respectful and I think everybody around the table is of the concern about the legislature, I'm wondering if it would also be the sense of the board that the states that were able to implement this sooner than that would -- the sense of the

board would be that those states would try to do so; not necessarily built into the motion, but that's the understanding, or is everybody is going to wait until the first of January or whatever?

VICE CHAIRMAN CARPENTER: Well, it's my impression that a number of states are already collecting this data and would continue to collect the data. I don't anticipate us changing what we're doing in any substantial way between now and the end of the year. We're going to continue doing what we're doing. I feel certain Delaware is, Massachusetts have a — all right, Paul.

MR. PAUL DIODATI: In our case, these kind of reporting requirements are typically tied to the permits which are annual and issued on an annual basis in Massachusetts, so we wouldn't be able to implement this sort of thing until January of '07, anyway.

MR. LAPOINTE: And those that implement sooner can get a gold star on their state reports.

VICE CHAIRMAN CARPENTER: Thank you very much. Any further discussion of the motion? Is there a need to caucus? We need the motion read. Would you please read the motion, George.

MR. LAPOINTE: I would do that: Move to set the implementation date for Addendum I for January 1<sup>st</sup>, 2007, with the possibility that states that need to go to the legislature have six additional months for implementation. State plans to implement Addendum I will be due to the commission by May 1, 2006.

VICE CHAIRMAN CARPENTER: Thank you very much. All in favor of the motion, please raise your right hand; all opposed, the

same sign; any null votes; any abstentions. The motion carries.

The next agenda item is an update on the federal status review. The Fish and Wildlife Service seems to have some initials here so, Wilson, I guess that's going to be you.

#### **UPDATE ON FEDERAL STATUS REVIEW**

DR. LANEY: Yes, sir, that would be me, Mr. Chairman, thank you. I am going to read into the record, Joe, and I will provide a copy to you the status review update that has been provided to us by Heather Bell from our Northeast Regional Office, who is the coordinator for the American Eel Status Review which is being conducted by the Service in cooperation with the National Marine Fisheries Service.

I will add parenthetically that Lydia Munger and I both attended both of the status review workshops and Steve attended the first status review workshop, so if you have questions, you can grab any of us. If you guys up there have anything you want to add, please feel free to do so.

Our second workshop for the American eel was equally successful as the first. We had excellent representation from Canada with over half of the experts representing Canadian government resource agencies or academic institutions.

Additionally, we had representation from both the Atlantic States Marine Fisheries Commission and the Great Lakes Fisheries Commission and two Indian nations. The information presented and assessed during this second workshop has put us ahead of schedule.

The most significant reason that we are ahead of schedule is the availability to the

workshop participants of the ASMFC stock assessment and peer review. Because of the availability of the stock assessment and peer review, we were able to complete the threats review by discussing contaminants and disease and were then able to move on to the discussion on the relative importance of Lake Ontario to the overall population, the life stages most resilient and vulnerable to the threats, and the species risk of extinction.

Based on the progress of these two workshops, we are recommending canceling the third workshop and instead focusing our efforts on summarizing specific data requirements for the Gulf of Mexico and Mississippi Watershed and drafting the status review document.

We will be checking with all of our affected regions and the National Marine Fisheries Service for their concurrence on the decision to cancel the third workshop.

A brief list of upcoming actions is as follows: The final minutes of the workshop and summaries of each section will be available on the Web, and I will provide that address momentarily here. With the assistance of Nature Serve, we'll be completing the updates of the eel distribution map for the U.S., adding island information and integrating the Canadian data.

The status review document will be drafted with input from the ASMFC Eel Technical Committee on format and content and then the twelve-month finding will be drafted. We anticipate producing a draft finding based on the status review by early May.

The finding will not be made public until signed by the director, Dale Hall. We anticipate June as the completion date for

the finding. And if you have any questions, I'll be happy to try and answer them, but Heather is the one who can really answer those, and I can give you her contact information as well. Do you want me to go ahead and give you that Website, Mr. Chairman?

VICE CHAIRMAN CARPENTER: That would be appreciated.

DR. LANEY: Okay, it's <http://www.fws.gov/northeast/ameel/>.

VICE CHAIRMAN CARPENTER: Thank you, Wilson. And in the interest of time, I think you can catch up with him after the meeting to get all of the slashes, forward and reverse, and direct your questions to the people that will be able to answer it, but thank you for that very thorough report.

The last item that I have on the agenda here is the advisory panel nominee, and I'll call on Lydia for that.

MS. MUNGER: Thank you, Mr. Chairman. There is one nomination for the advisory panel. The nominee's name is James Brown and is a commercial fisherman from New Jersey.

MR. LAPOINTE: Did we have a package for that person?

MR. McCLOY: Probably not, George. I just gave them to Tina on -- when was that, Monday? Tuesday? It has been signed off on by Mr. Berg and my boss, Dave Chanda. We did not have a legislative sign-off because we're in limbo right now.

VICE CHAIRMAN CARPENTER: Does anyone wish to see that? They are on the back table if anybody wants to see it. Tom, would you like to make a motion to have



that added?

**MR. McCLOY: Yes, I would. I'd like to move that the board approve the nomination of James Brown as the commercial potter eel advisor from the state of New Jersey.**

VICE CHAIRMAN CARPENTER: Is there a second to that motion? Seconded by John Nelson. Any discussion? Any public comment? All in favor say aye; all opposed, no. The ayes have it; the motion passes. I have one last request and that's from George Lapointe.

MR. LAPOINTE: I do, Mr. Chairman. I just want to thank Lydia for her help on the board. She is leaving the Commission. This will be her last board meeting, and I think she deserves a round of applause for helping us out. (Applause)

VICE CHAIRMAN CARPENTER: Thank you, George. I was going to get to that, but

since you've taken care of it, I will also express the board's gratitude to the technical committee, to the stock assessment subcommittee and to our peer review panel that did a yeoman's amount of work in a very short period of time with very little data.

We do appreciate and acknowledge their dedicated service. I see a motion down there to adjourn, but maybe not.

#### **OTHER BUSINESS/ADJOURN**

DR. KRAY: Yes, there is a **motion to adjourn**, and the Shad and River Herring Committee will be meeting in five minutes.

VICE CHAIRMAN CARPENTER: Thank you very much. We are adjourned.

(Whereupon, the meeting adjourned at 5:35 o'clock p.m., February 22, 2006.)

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