## ATLANTIC STATES MARINE FISHERIES COMMISSION

## AMERICAN EEL MANAGEMENT BOARD

Samoset Resort Rockland, Maine

October 17, 2001

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The American Eel Management Board of the Atlantic States Marine Fisheries Commission convened in the Rockport/Camden Room of the Samoset Resort, Rockland, Maine, Wednesday afternoon, October 17, 2001, and was called to order at 2:10 o'clock p.m. by Chairman Lewis Flagg.

CHAIRMAN LEWIS FLAGG: Good afternoon. I'd like to convene the meeting of the American Eel Management Board. We have the meeting agenda, which has been mailed out to you previous to the meeting.

I would like to ask if there are any additions or deletions from the meeting agenda. I would note that with respect to the election of the vice-chair, we did elect a vice-chair at our last meeting in January.

Jack Travelstead was elected and so I would suggest that we delete that item. I'm sure that there's only one person in the room that probably would like to have some reconsideration, but sorry. So we can delete that item from the agenda.

Are there other items that should be added or deleted from the agenda? I would like to mention, also, that we will be discussing, under Other Business, a letter which was received from American Heritage Rivers relative to the Potomac River, so we will include that on the agenda under Other Business. Are there other items? Seeing none, then we will proceed with the agenda as amended.

You also received in the mailing the minutes of the meeting of January, the last meeting of the Board, and unless there are objections or omissions from those minutes, we'll declare them confirmed as written. Are there any corrections to the minutes of the last meeting? Hearing none, then we'll proceed and declare them confirmed as written.

At this time, we're going to afford an opportunity for public comment. If there are members of the public that would like to comment on American eel, there is an opportunity to do that at this time, and there will be opportunities throughout the meeting for the public to comment.

Are there any public members here that would like to comment at this time? Okay, seeing none, we'll proceed. At this time, I'm going to ask Heather to give us an update on the Plan Review Team Report.

MS. HEATHER M. STIRRATT: Thank you, Lew. The PRT convened via conference call on September 24th to discuss the status of state compliance.

Compliance elements for the American eel FMP include the conducting of the Young of the Year Annual Abundance Survey and the full implementation and enforcement of the management measures listed under Section 4 of the FMP.

After discussion of the reports submitted by 16 of the 17 states and jurisdictions, all states were found to be in compliance, which is consistent with last year's report.

The PRT notes that the District of Columbia has not yet submitted a report to the Commission regarding the status of that jurisdiction's compliance with the FMP. This is something that was done last year as well.

Staff has made numerous attempts to try and contact the District to request that a report be submitted and as I noted, this is the second year in a row where this problem has occurred.

I would note from the PRT's report, which was included in your original mailing, that the states of New Hampshire, Pennsylvania, South Carolina, Georgia and Florida continue to meet the de minimis criteria established in the plan.

Therefore, they will remain as de minimis states. They were approved during the last PRT report to this body, which I believe was back in January of this year.

In addition to that, this year we also received an additional request for de minimis status. That request came from the state of Massachusetts.

The PRT reviewed the landings information that was available for the state of Massachusetts and found that they also met the de minimis criteria and today recommends that that state be approved for de minimis status.

In the PRT report, it changed a little bit from the last time that we reported to you. The last time we reported, the states were not required to have full implementation of all of the sections of the FMP.

That wasn't required until January 1 of this year; and as such,

the PRT took a significant amount of time to review the state compliance reports this year.

You'll note that in the state-by-state evaluation, there are significant comments that were pulled out of each report on trends or notable things that are going on within the state or jurisdiction for which the report was submitted.

There are also sections which note deficiencies in the report, areas of concern and compliance issues. If there were any of those, I would be reporting those to you today. There are a few concerns which may have come up in just the format.

The way that the report was submitted was not consistent with the format which is established in the FMP. If that is noted for your state, I would certainly recommend that in the future you take heed to the suggestion by the PRT that that be resolved and that you follow the format which is outlined in the FMP.

But overall, we were pretty happy with the reports that came in. Again, we spent a significant amount of time reviewing them; and again, we were very happy to report that all 16 of the 17 states and jurisdictions which are in the plan were in compliance at this time.

The PRT did note several comments and recommendations which I would like to bring before the Board today, the first of which is that the PRT strongly recommends that all states implement mandatory reporting requirements to increase the accuracy in estimating state and coastwide landings.

As you know, we do have some concerns that the landings information is less than what we would like to see be coming forward. And certainly, to the extent that states can implement mandatory reporting, that would certainly increase our confidence in those landings data.

The PRT also wishes to remind states of the standardized report format. Please take heed of that in the future. If your state employees have comments by your state in the PRT report, please note that those need to be resolved in next year's submission.

The PRT wishes to remind states that the annual reports should cover the previous calendar year in addition to the current calendar year.

So, we should have information, in the case of 2001, for both 2000 and the current year, which would be 2001. The PRT wishes to remind the states that if no changes were made to the commercial and/or recreational management measures from last year, there's not necessarily a need to reiterate those sections.

A simple reference to last year's report would be sufficient. The PRT recommends that the Technical Committee develop a standardized report format for the Young of the Year Abundance Survey.

I had a lot of comments this year, well, calls, rather, from state employee personnel that were concerned about what format they should be submitting their reports in on the Young of the Year Abundance Survey.

Certainly, I think it would be helpful to provide the states with a short format of what information really needed to be included in that section of the report.

The PRT requests that state personnel highlight the notable trends. I think it's very important for managers to know what are the remarkable elements that are coming out of each state report. It's helpful to you all in making your management decisions for the next year.

It's also helpful just to note what's going on. You know, did the bottom fall out of the market this time of year? Those types of things are important information; and so to the extent that your state personnel can note those notable trends, that would be very helpful to the PRT.

And the PRT continues to express concern over the lack of data available for states to report their landings by life stage. This is something that I have reported to you all on many occasions.

It continues to be a problem, but we are doing the best that we can with the data that we do have to provide you with the best available information on which to make your decision. Mr. Chairman, that concludes the review of the PRT report.

CHAIRMAN FLAGG: Thank you, Heather. Are there questions of Heather concerning the PRT report? Bruce.

MR. BRUCE FREEMAN: Thank you. Heather, the difficulty with District of Columbia reporting, you indicated there was no report last year or this year. Has Ira been contacted? Is that something that he has budgetary problems or simply not getting any response?

MS. STIRRATT: I have contacted the District of Columbia, primarily Ira's phone number, his direct phone number, numerous times. I have not been able to reach Ira directly. I have left numerous voice mail messages. I have had no response. That's really the best that I can offer in terms --

MR. FREEMAN: Did you tell Ira if he didn't answer your calls,

he's not going to be invited to any more meetings?

MS. STIRRATT: I'm not going to answer that one.

MR. FREEMAN: I noticed in some of the reports they have included their Young of the Year Survey and other states not. Was that because we didn't get that from those states or why is that discrepancy?

MS. STIRRATT: Bruce, all of the reports included the Young of the Year Survey information. Again, I was just trying to pull out notable trends, things that were highlighted in the reports.

Certainly, the Board should not interpret this report to mean that just because something was not mentioned about that state's Young of the Year Survey, that they did not perform one. That was one of the criteria that the PRT looked at very carefully.

CHAIRMAN FLAGG: Gordon Colvin.

MR. GORDON C. COLVIN: Thank you. Heather's highlight for New York notes that the MRFSS database indicates that New York landed 79 percent of the coastwide recreational harvest of eels. I guess it's nice to be number one in something.

I think our commercial landings totaled about 44 pounds, which is probably an equally reliable figure. I think, however, the recreational data suggests that we ought to have some meetings or at the next Wave meeting with the MRFSS contractor and remind their interceptors to tell the anglers that it doesn't count if you put it on the hook yourself.

CHAIRMAN FLAGG: A.C.

MR. A.C. CARPENTER: Thank you. I appreciate the new format of the report, and I might suggest that one of the italicized areas might be the Young of the Year information since each one of us have the requirement to do that.

If you could get a one-line summation of that and then reserve this comments and trends for other important information, I think that that would be helpful.

CHAIRMAN FLAGG: Thank you, A.C. Other questions of Heather? Paul Perra.

MR. PAUL PERRA: I don't want to revisit D.C., but I don't think we should just not do anything. I think at the minimum, the Chairman of the Eel Board should send a letter of concern to the District of Columbia before we get into a compliance issue or problem with them over non-reporting.

CHAIRMAN FLAGG: Other comments from others? We had a suggestion from Paul Perra that the Chairman send a letter to D.C. relative to this issue and request response. Do I hear any objection to doing that? If not, I'll direct staff to write the appropriate letter and make sure that the Board members receive a copy of that.

Would you prefer to have that circulated as a draft to the members before it goes? Okay, but we will certainly make a copy available when it's sent to the other Board members. Any other comments? Okay, the next item we have is the FMP Review.

MS. STIRRATT: The FMP Review, just to jog your memory, is something that we do on an annual basis, and this year's has been updated with the latest information for 2000/2001.

As required by the Charter, the FMP Review must contain information on the current status of the stock, the status of the fishery, status of research and monitoring and status of monitoring measures, status of compliance, and so on.

I would like to cover each one of these sections just very briefly. You should have received a copy of this FMP review. It's entitled "The 2001 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for American Eel."

To briefly cover the Status of the Stock Section, the current status of the stock is poorly understood. This is primarily because we have data which is very limited.

The FMP does seek to improve this situation by requiring the states to provide information on harvest and cohort data by way of the Young of the Year Annual Abundance Survey. And that information, we are beginning to get multiple years data in there and hope to have some indexes of abundance very shortly.

Relative to the Status of the Fishery, just briefly, the landings, which cover Maine through Florida, indicate a decline after a peak in the mid-1970's. The focus is on the most recent period of time in the report, whereby you will notice an increase in the commercial landings occurred in 1999.

Landings equaled about 1,408,000 pounds, so to speak. Landings from Maryland, Virginia, and Delaware combined accounted for around 47 percent of the commercial landings in 2000, with 39 percent coming from Maryland and Virginia.

It is notable that the Potomac River Fisheries Commission reported a combined landings for 2000 from Maryland and Virginia equivalent to about 208,000 pounds.

According to MRFSS, the 2000 recreational harvest was a little bit greater than 25,000 fish, which represents a significant increase in the number of fish landed from the 1999 values, which were around 5,000 fish.

And as Gordon pointed out earlier, New York's recreational landings in 2000 accounted for 79 percent of the eel landed recreationally, with over 20,000 fish reported.

The Status of Research and Monitoring: The entries within this section are derived both from the requirements in the FMP, as well as those research needs which were identified by both the Technical Committee and other bodies that are interested in eel within the Commission's process.

The Status of Management Measures and Issues: This section makes mention of Sections 3 and 4 within the FMP, which include the Young of the Year Abundance Survey as well as the commercial and recreational management measure requirements.

The Status of Compliance, as we just covered, all states were to be found in compliance for the calendar year 2001, with the one exception of D.C., where we cannot determine whether or not they are in compliance or not.

It is notable -- one thing that I will mention about state compliance; it's not an issue for this year, but in Pennsylvania's report -- and we will be covering this later -- they noted in Pennsylvania's report that they had no intention of continuing the Young of the Year Abundance Survey beyond this past year.

While it is not a problem for this year's compliance review, depending upon the action that's taken later in this meeting, it may or may not be a compliance issue for the years forthcoming. So you should keep that in mind.

I would also like to make mention of the recommendations that the PRT provided. They differ a little bit slightly from the recommendations which were just presented, which include all states and jurisdictions should implement the requirements and recommendations of the FMP.

The PRT recommends that the management board consider recommendations of the ICES working group on eels, which is an international body that is looking at European, American and other eel-type management programs.

The PRT recommends that de minimis criteria be reevaluated in light of data availability. This seems, and continues to be, problematic.

The PRT notes that catch-per-unit effort may be difficult to estimate, even though it is requested and asked for in the annual reports, given that fishery practices such as stock piling of harvest and holding activities are common in eel fisheries.

It's also notable that reporting of catch-per-unit effort may also be complicated by the level, i.e. the life stage data collection, which is just the level of data that is collected by the states. Mr. Chairman, that concludes the review of the FMP.

CHAIRMAN FLAGG: Thank you, Heather. Any questions of Heather? Bill Cole.

MR. BILL COLE: Thank you, Mr. Chairman. Heather, could you elaborate, please, on Recommendation 3 a little bit, about the de minimis criteria and the PRT's concerns there, and then I have a follow-up question, Mr. Chairman.

MS. STIRRATT: Certainly, Bill. As I have noted in previous presentations to this board, de minimis in the FMP is allowed. Let me just read it directly from the FMP: "States may apply for de minimis status for each life stage, if for the preceding two years their average commercial landings by weight of that life stage constitute less than 1 percent."

It is very difficult right now for the PRT to evaluate life stage based data. We are getting some reports which offer their landings divided up by life stage. Others are simply saying, well, we don't have an elver fishery or we don't have this; therefore, we're assuming that it's all yellow eels that are landed.

I would say there's a great deal of uncertainty associated with the landings data that are available right now, and the PRT feels that if, in fact, this is the way that the Board intended for us to look at de minimis, then we are doing an insufficient job right now based upon the data that is available and perhaps that would require that the de minimis definition be either reevaluated or redefined in the FMP.

CHAIRMAN FLAGG: Bill.

MR. COLE: Mr. Chairman, my follow up question is a little later in the report, which has not been directly addressed by Heather yet, but is the stock assessment methodologies from the subcommittee of the American eel group.

Heather, my question is has the PRT looked at this subcommittee report with its rather substantial data requirements? I can't right now say whether they are in addition to more stringent than

what's in the FMP, but they are certainly asking for a substantial amount of data. And my first question here is has the PRT looked at this subcommittee report and what are the comments of the PRT?

MS. STIRRATT: Bill, the most direct answer I can give you to your question is that the PRT as a holistic body has not reviewed the report. However, I would note that there are significant numbers of PRT members that serve on that body that are members of the Technical and Stock Assessment Subcommittee.

And just for clarification purposes, and we'll get into that later, but in the Stock Assessment Subcommittee report, all of the items which will be requested for additional monitoring elements are in addition to what's required in the plan. So, we're looking at an elevated level of monitoring.

CHAIRMAN FLAGG: Other questions of Heather? David.

MR. DAVID V.D. BORDEN: Thanks, Mr. Chairman. Heather, on the first recommendation that all state jurisdictions should implement the requirements, is that a specific reference to D.C. and Pennsylvania, because there are no other deficiencies noted in the text?

MS. STIRRATT: David, that's something that I list under every FMP review I do just as a reminder that we need to continue to hold high standards for implementation and enforcement of our FMP's.

So, it was not meant to be specific to D.C. or Pennsylvania, but certainly a reminder to all states that we need to be doing a better job.

MR. BORDEN: But as I understand it, the only deficiencies now are in those two jurisdictions? Okay, thank you.

CHAIRMAN FLAGG: John.

MR. JOHN W. CONNELL: Heather, I know the data is very sketchy. Do you think you'd be able to provide us with an educated guess on the decline in the commercial catches and whether that might be due to stock status or lack of effort?

MS. STIRRATT: John, I'm hesitant to try and answer that because there's a lot of uncertainty surrounding the eel fishery right now. One of the things that I can speak to directly is that I noted that we're seeing a decline since the mid-70's.

A lot of that, it is my understanding, has to do with simply the market price for eel right now. So, that is, I think, the biggest driving factor. Perhaps Julie could elaborate on maybe why there would be other reasons for that type of decline.

MS. JULIE WEEDER: If you guys don't know me, I'm the Technical Committee Chair right now. My name is Julie Weeder. I'm from Maryland.

The first thing I would say is that I believe -- and I think the Technical Committee would agree -- that the data we have showing a decline is very lacking, because I think most of us would recognize that without effort data to go with that, as Heather touched on, we really have no idea if there's a true decline.

Well, we have no idea if there's a true decline in the population versus the landings. So, certainly, we might decide to believe that the landings are completely accurate, but all that tells us is that the number of eels that are landed is going down.

In fact, what that tells is that the weight of the eels that are landed is going down. It doesn't tell us anything about the true abundance of the eel.

Because there's no historic effort data, that means that all these landings data are very limited in their utility and they always really will be, at least the ones before we were to get more effort data.

MR. CONNELL: Okay, just a follow up. Do you anticipate a time when we might have enough data to make a decision about that, in years?

MS. WEEDER: Sure. If I gave you a number, it would really be a guess right now. The five years is something that has been thrown around. But it's important to note that really all that five years would tell us is what the current status of the stock is.

But without really knowing what the historic status is, it's very difficult to know if the stock status is sustainable or really where we want to be.

CHAIRMAN FLAGG: Bruce.

MR. FREEMAN: Thank you, Lew. Heather, a question concerning the harvest of eels for bait. I know in the commercial side, if they're harvested, they're usually reported, either by the fish --well, usually by the dealer, and yet I know in our instance there's a large interest in harvesting eels at a much smaller size for bait.

I suspect those catches are not entered anywhere. They don't go to the normal food outlets. They go to bait and tackle stores, which usually are not licensed for anything relative to our interests.

My question to you is do we have any knowledge of what the harvest of eels would be for bait?

MS. STIRRATT: Well, I'll let Julie answer your question specifically, but related to that question and the concern that you're raising, I would simply note that when the PRT looked at the MRFSS database to see what the landings were, recreationally speaking, just about all of those landings were associated with extremely high proportional standard of errors.

We are seeing estimates of like 98 and 99 and usually anything above 30 percent is really uncertain data. So, 98 and 99 is almost unacceptable, I would say. I simply report it because it's the best information that I have available and I'll let Julie speak directly to your question, Bruce.

MS. WEEDER: Sure. Heather, maybe you can clarify for us. When you were talking about the MRFSS data earlier, somebody said that they thought that that data may reflect the use of eels for bait rather than people catching them recreationally, correct?

So, I think it's important to make a distinction between landing of the eel versus using the eel for landings of something else. I think I can state unequivocally that we know virtually nothing about the bait fishery in any terms of numbers.

There's a lot of anecdotal information. I think most states have a general sense of whether people use eels for bait at all. They have a general sense of the size of eel that might be needed.

I think they all agree, as you mentioned, that the basic venue for getting those eels is a small bait shop, something along those lines, sometimes, I think, people just putting an eel pot off their dock.

So, you've seen all the difficulties that we have in collecting commercial data. I think that the commercial bait fishery is vastly even more difficult for us to monitor at this point, and I think it's important to recognize concern about that because the eels that are being harvested are extremely young and extremely small.

So, that, obviously, has implications for not only sustainability because they're not able, obviously, to reproduce, but even for profitability of the fishery or whether the fishery can be sustained, because, obviously, they can't grow to a market size that is very valuable to commercial interests.

MR. FREEMAN: If I may, that was a rhetorical question because I think I knew the answer. But in our area, the bait market is very large as the striped bass population increases, particularly in

the fall and spring. There is a large demand for eels as bait.

If, for some reason, those bait eels are entered into the commercial stream, it would definitely lower the average size. So, on one hand we certainly should know what that bait demand is, which I agree we don't, but if some of those are somehow getting into the commercial reporting, then we would expect to see a continuing decline because you're talking about a two-pound eel for food as opposed to a six-ounce eel for bait, and if they're combined, you definitely see the average weight change.

MS. WEEDER: An important thing to note about that as well, I think we all would agree that that would be a problem, and the way that the landings are reported right now there's no way for us to sort that out. The fact that nobody is -- well, I shouldn't say nobody, but not very many states are doing any commercial sampling for length. We really have no way to break that apart.

CHAIRMAN FLAGG: Gordon Colvin.

MR. COLVIN: Heather, I have a question about the second recommendation, and I know that the information has previously been provided to us, but I, frankly, just don't recall. Could you give us kind of a quick overview of the ICES recommendations and what they might mean?

MS. STIRRATT: Gordon, I am absolutely going to defer this to Julie, as she was the representative that was present at that meeting.

The Commission did send two representatives to the ICES working group meeting that was held not this year, but the previous year, where those recommendations were offered, and so I'll let her speak to that.

MS. WEEDER: All right. I regret that I don't have all the recommendations in front of me, but I can certainly give you the gist of what we discussed.

One thing that was identified in the ICES working group meeting was something that we all already found, and certainly is true in Canada as well, that the amount of data that we have to work with is extremely lacking.

There was great urgency expressed by the working group as to what a problem this was because there's a lot of data, that the very little data that we do have, any kind of trends indicate that there are some rather alarming declines, depending on what you want to interpret the landings to be.

There are also some indexes that could be used as recruitment

indices that show a drastic decline in recruitment of American eel. So, that was really an overriding theme of the discussion, that there are large declines going about and we have no way to really quantify them at this time.

Another thing that they focused on a lot was habitat concern, basically, habitat reduction and what a large part that might play in the eel decline.

Recommendations included, of course, collecting the kind of data that we might need to be able to really be able to assess the stock, and specifically to set biological references point so, obviously, we would know if we were past the danger zone, et cetera.

One important guiding principle of ICES, really, is this precautionary approach, which is a specific, really, set of guidelines to assess, really ensure that a population is not in danger.

I'll talk about that a little bit in the Stock Assessment Subcommittee report. But it really requires -- and I have a couple of notes on that. One main point is that managers need to identify what potential problems that could occur and develop a plan for action before those problems occur.

So, it really is a proactive approach rather than a reactive one. They have really specific recommendations for how that can come about.

The precautionary approach, as I said, has a great emphasis on biological reference points, quantitative numbers that we really need to pay attention to in order to avoid, as they say, basically a kind of watering down of concerns because there's no really common concern point that people can agree to.

Finally, another main point, but certainly not the only one, is that they recommend very close monitoring and control of all fishery effort.

That can include really restricting any additional development of a fishery and, of course, all the different management strategies that are generally available, size limits, quotas and that sort of thing. So, does that answer your question?

MR. COLVIN: Yes, I think so, thank you. I just wonder if it would useful -- I guess what I would be uncomfortable with, Mr. Chairman, is just accepting this recommendation and then putting it on a shelf and doing nothing with it.

I wonder if it would be useful for the Board to establish some

process whereby we will give thoughtful consideration to the details of the ICES working group recommendations and actively deliberate and consider their incorporation into our management program, whether by addendum, amendment or something else in the future. I'm not sure what to specifically suggest, but I would really like to see us give serious consideration to the details of this.

CHAIRMAN FLAGG: Yes, Heather.

MS. STIRRATT: Just in response to that, Gordon, I'd like to mention that, as I mentioned earlier, the Commission sent both Vic Vecchio from New York and Julie Weeder from Maryland to attend the ICES working group.

I believe it was in the fall of last year. This year, because of budget limitations, we were unable to send those two representatives to the international forum for discussion. However, I have spoken with Lisa Kline; and if it is at all possible, we will try to find some additional monies to send them to next year's discussion.

So, as these new recommendations come forward, certainly, we will be providing those to the Management Board for some type of consideration and/or action, if appropriate.

CHAIRMAN FLAGG: Yes, it seems to me that the major thrust of the ICES recommendations really had to do with the precautionary approaches, as Julie had mentioned, and that in the absence of data, that we should try to be risk averse in our management policies relative to this resource until such time as we have better data by which to manage the eel stock.

So, I think that just having that as a mindset in terms of dealing with management issues and management recommendations and data collection associated with the American eel, to keep foremost in our minds that we should try to be as risk averse as possible in terms of management of the eel resource. Yes, Paul Perra.

MR. PERRA: Question for Julie. Eels can be found way beyond the jurisdiction of the Commission and your participating in ICES. I remember when we formed the committee, there was interest in having the Canadians participate and maybe someone from the Gulf.

Also, I'm finding sporadic papers and reports, not a lot, about disappearance of eels from certain systems, even the Great Lakes or from fresh water ponds here and there.

So, I have a real concern about the status of the stock, and I think if you look at the biomass that eels traditionally, where

they have done studies in some of these freshwater systems, eel biomass, fish biomass, for those ponds may be 30, 40 percent of the fish that were in these areas.

So there's some real ecosystem concerns if we're losing one of the major species; yet, we don't have the data really to look at that. So, question number one is are we getting participation in the Technical Committee from other scientists from Canada or the Gulf and are we getting some of our freshwater counterparts, information from them?

CHAIRMAN FLAGG: Would you like to respond, Julie?

MS. WEEDER: Yes. Brian Jessup from Canada is a distinguished scientist who has participated with the Technical Committee for quite a while. As I understand it, he is retiring and his replacement really for eel expertise is currently unknown. Is it true, Heather, that he was not an official member of the Technical Committee, that he was invited?

MS. STIRRATT: I'm glad Julie raised this point because this is something that has been difficult for staff to try to bridge. Certainly, when we hold Technical Committee meetings, those meetings are announced to the Canadians and, certainly, they are invited.

However, as you all know, our budget is very limited to those states that fall within our jurisdiction, and so it has been difficult for us to provide reimbursement to the international officials that would be worthwhile in attendance to these meetings.

However, they have been involved. They have been involved in our conference calls that we've had. They are up to speed with everything that is going on with American eel management, at least within the U.S. jurisdiction right now.

It's just an unfortunate side effect that we have not been able to reimburse them for travel to and from our meetings. I would also just add to what Julie said about Brian Jessup's replacement.

He does have two individuals who will be taking up eel after he retires, and it's my understanding, from speaking with Brian just as recently as about three weeks ago, that those individuals have not been actively involved in eel management to date.

They have some knowledge of the eel fishery, but we're certainly going to be losing a very tremendous asset in Brian when he does retire.

MS. WEEDER: I'd like to note that Brian was instrumental in

development of the Young of Year Survey. So it's important for you all to know that he wasn't just a spectator or somebody that gave some comments here or there. He was really a critical part of the whole process.

Your second part of your question about the freshwater component; the Technical Committee has been considering -- they've made an effort to find out what kind of freshwater information there is in each state.

I know that Georgia has a lot of information, as does Maryland, and I know other states do as well, which can give us an idea of the abundance. One thing to note, though, is that usually I think it's true that a lot of that data doesn't go back that far.

It might tell us the current status, but, again, if there has been a decline, it may be difficult to quantify what that is. Does that answer your question?

MR. PERRA: Yes. Can I follow up with a comment? I don't want to take much more time, but I do think that we're kind of caught in a Catch 22.

We have so little information, sometimes it's hard to go forward with so little information, and I think we need to get more -- that's what I hear -- than what we have, and I think what we have mandated in our plan isn't quite enough.

So, I would like to see some effort made by the Plan Review Team or the Technical Committee to come up with, say, a draft addendum to the plan to put before the Board what is needed.

CHAIRMAN FLAGG: Thank you, Paul. Susan.

MS. SUSAN SHIPMAN: I don't know whether you've had a chance to look at the proposed action plan or not, but we do not have eel in an addendum development phase for next year. I mean we simply don't have the resources.

This will be up to you all tomorrow morning to, you know, deliberate how you want to adjust priorities. But right now, I just want to advise you if the Board elects to go this way, then it would be at least 2003 before we could get going on this.

CHAIRMAN FLAGG: Thank you. Dieter.

MR. DIETER BUSCH: Thank you, Mr. Chairman. If the Board recalls that at the time we developed the FMP for eel, we were looking at data sources from the Atlantic coastal area, including Canada, and the best dataset that we had that was fishery independent was the dataset from the St. Lawrence that the province of Ontario

collected.

I had a chance to talk with Dr. John Cusselman recently, who is the senior scientist for the province, and he told me that the eel run this year up the St. Lawrence was statistically zero.

Now, if you recall, about 10 or 12 years ago the runs were in the 1 million number. Then it dropped down to about 10,000 and went back up to 100,000, and this year it's statistically zero.

The complicating factors in this dataset are that this is not one cohort, but as many as ten cohorts, anywhere from age six to age sixteen or thereabouts that make that run.

The conditions were not dissimilar from the recent past, except that the water flow was down somewhat. But otherwise, the obstructions and so on theoretically have not changed. Thank you, sir.

CHAIRMAN FLAGG: Thank you. Pres.

MR. PRESTON PATE, JR.: Thank you, Mr. Chairman. Susan just expressed a concern on behalf of the staff resources available to the Commission that somewhat mirrored the same ones that I have about the resources that are available to me to carry out our responsibilities at home.

I expressed considerable concern when we adopted this plan originally about the monitoring and the reporting requirements that were built into it relative to the priorities that I have and the limited resources I have to fulfill priorities that are set by others for me other than those that come down as compliance requirements in these fishery management plans that we develop.

I, like many of the other state directors, are faced with some very severe budget constraints. I lost seven positions and a million dollars out of my budget last year.

I fully suspect when I go back home next week I'm going to be looking at losing anywhere from five to seven more positions and perhaps another million dollars out of my budget, and those are limited resources that have to be lost at the expense of some other very important programs that we have.

My flexibility in being able to comply with the requirements of these plans is growing more and more limited. I'm very concerned about that because I can't ignore what I've got to do at home.

I think as we continue to heap more requirements, more data collection and reporting requirements on the states through these plans, we're setting up a situation where, out of sheer necessity,

a state is going to have to go out of compliance.

That may very well happen with this plan if the data collection gets any more stringent than it is right now, and that's all with due respect to the information that we need to manage this species, but I'll be honest, eel ain't a real high priority for me.

CHAIRMAN FLAGG: Other comments? Before we proceed, I would like to get back to one item which came under the Plan Review Team report, and that is the request by Massachusetts for de minimis status.

I think we all have a letter from them requesting de minimis status on the basis that their commercial harvests are less than 1 percent of the coastwide harvest, which does meet the requirements for de minimis status.

So I would like to have some discussion and a possible motion relative to that issue if one is to be forthcoming. Yes, David Pierce.

DR. DAVID PIERCE: Thank you, Mr. Chairman. Massachusetts once again requests de minimis status for the American eels. Last year the Plan Review Team concluded that we did meet the de minimis criteria, but at least one board member objected because we based our request on 1998 and 1999 data.

So that concern was justified. Mandatory reporting of landings in Massachusetts was not in place, but now it is. Mandatory reporting is required. It was required in the year 2000, the year 2001, this year, and, of course, it will continue to be mandatory.

On March 14, we sent a letter to Heather. I believe that letter was made available to the Board, again requesting the de minimis status.

We noted, as we have before, that in Massachusetts we have no fisheries for glass eels or silver eels. Through mandatory reporting, we determined that our landings for yellow eels were well below 1 percent of coastwide landings.

Our year 2000 yellow eel landings were about 2,800 pounds. We expect that our year 2001 landings will be about 3,500 pounds, and that's much less than the 1 percent required for de minimis status.

That's about four thousandths of a percent, 0.004.

Coastwide eel landings for 2001 so far, I understand, are about one million pounds and we don't expect to have many more eel

landings this year. We've already adopted commercial and recreational eel restrictions in Massachusetts and we intend to keep them.

However, we feel that the de minimis description will justifiably exempt us from the trip reporting requirements that we have to submit monthly, at least the fishermen do. We'd like to go to an annual catch report.

De minimis will also exempt us from the fishery-dependant biological monitoring, so we feel this makes a lot of sense. We will, of course, continue to do our fisheries independent monitoring. So with that being said as background for our request, Mr. Chairman, I would move that the American Eel Board grant de minimis status for Massachusetts.

CHAIRMAN FLAGG: Is there a second?

MR. JOHN I. NELSON: Second.

CHAIRMAN FLAGG: Motion by David Pierce, second by John Nelson, to declare Massachusetts de minimis with respect to American eel. Discussion? Paul Perra.

MR. PERRA: A question for Dave. Dave, what won't we be getting? I mean, will we still be getting the different sizes of eels at the end of the year? Will we be losing some key data that we are getting now, or would we just get it right at the end of the year instead of monthly?

DR. PIERCE: No, you'll still receive the data that is needed for continued management of eels for our understanding of the nature of the fisheries up and down the coast, certainly in Massachusetts.

But as I said, this removes a burden from us, a burden from fishermen, something that's not needed because of the magnitude of our landings.

But, obviously, we'll continue to monitor those landings so that if there are any changes, we'll be in a position to make that known to the Board, that every state attempts to do, of course. It's part of the monitoring process.

CHAIRMAN FLAGG: David, I have a quick question, too. With respect to eel landings in Massachusetts -- I can't recall now -- is there a prohibition on commercial harvest of eels in inland waters, or do your landings data also encompass any commercial fisheries that occur in non-tidal waters of Massachusetts?

DR. PIERCE: I believe that's all waters.

CHAIRMAN FLAGG: Thank you. Other discussion? Yes, A.C.

MR. CARPENTER: I just want to note that the PRT, in their item Number 4, said that CPUE's may be difficult to estimate given the current practices.

If you go to an annual reporting system, you will have no CPUE data at all that's going to be of any value to anybody, but that's not going to stop me from voting in favor of your motion.

CHAIRMAN FLAGG: Other comments? Okay, we have a motion before us. Why don't we take 30 seconds to caucus and we'll call a vote.

(Whereupon, a caucus was held.)

CHAIRMAN FLAGG: Okay, has everybody had a chance to caucus with your delegates? Let's call the vote. All those in favor, signify by raising your right hand; those opposed; null votes; abstentions. The motion carries. David.

MR. DAVID CUPKA: Mr. Chairman, before you move on to the Technical Committee report, I would like to make a motion that we accept the report from the American Eel Plan Review Team.

CHAIRMAN FLAGG: A motion has been made to accept the report of the American Eel Plan Review Team. Second by David Borden. Discussion?

All those in favor, signify by saying aye; opposed. The motion carries. Thank you, David. And now we'll ask Julie for the Technical Committee report.

MS. WEEDER: All right, you can see that the first item on the agenda is Pennsylvania's exemption request. In the materials that were sent to you prior to the meeting, you received a letter that was sent to Heather on March 23rd from Mr. Peter Colangelo, the Executive Director in Pennsylvania.

This letter requested an indefinite exception for Pennsylvania for the Young of Year Survey. He makes some main points in there which I suppose I'll go over briefly, even though you can read them.

He identified that when they did their survey, they found a lot of problems with it. It was their opinion that the habitats that were available to them were unsuitable for the survey. The gears that they could use at those sites didn't work out.

Their catches were very low. They make the argument that they're so far from the coast that the data may not be meaningful, and

also their biggest concern was that their staff and the amount of time required was just prohibitive.

On July 30th and 31st, the Stock Assessment Subcommittee considered their request at their first meeting, and they concluded that an indefinite exemption was not justified based on the available information.

They did make a note that with some changes possibly to their survey design, they may be able to make the survey work. Basically, this was the first year that Pennsylvania and many other states have tried to do it, and it turns out that it might be that with some modification they would be successful.

Some main points that the Stock Assessment Subcommittee made -- you also received a memorandum from the Technical Committee basically outlining what I'm about to say.

So, their points were, to sum up, that there may be sites that had suitable characteristics; that perhaps Pennsylvania could consider some different characteristics in choosing their sites.

Even if the catches were low, they may be extremely significant to the survey because that may be the whole point of the survey. While the Committee was sympathetic to their concerns with staff and time, we acknowledged and noted that all of the states were having similar concerns and it was a hardship to most of them.

Their argument that they were a far distance from the coast and therefore their data may not be meaningful was countered by the point that many other states are as far or farther from the coast, their sites are, due to things like having to go around barrier islands or having to go up into major estuaries first.

It's important to note that despite Pennsylvania's distance from the ocean, the individuals that they did catch were glass eels, so they had not even pigmented yet.

So, in conclusion, the Technical Committee offered their assistance in modifying the survey design in Pennsylvania in order to better achieve success in the survey and they, as I said, don't think an indefinite exemption is justified, especially because in the future things might work out better. Indefinite just excludes that possibility forever.

CHAIRMAN FLAGG: Any comments or questions of Julie? Yes, Dave Borden.

MR. BORDEN: I don't have a question, but I do have a statement. I'm sympathetic to the desire of the Technical Committee to have uniform sampling up and down the coast.

But I just note that I think all of the states find themselves in exactly the same position that Pres Pate described. In our case, we're looking at 7.5 percent budget cuts and revenues have declined 2 to 5 percent since we initiated that exercise.

So, it's going to get worse, not better, in the near future. With that in mind, the thing that I think is appropriate here is part of the Pennsylvania request is based on cost effectiveness, which I think is a consideration that all of the states have to face up to these days.

To me, the reasonable course of action here is to provide a one-year exemption for the state of Pennsylvania, and at the same time ask the Technical Committee, as they have offered in their report, to meet with -- or maybe a subcommittee of the Technical Committee to meet with representatives from the state of Pennsylvania and see whether or not a cost-effective survey can be designed for Pennsylvania waters.

CHAIRMAN FLAGG: We have given a one-year exemption to Pennsylvania relative to the Young of the Year Survey for this past season, so unless we continue that or do something else, then

MR. BORDEN: They already have one?

CHAIRMAN FLAGG: Yes, they have one right now. They had one for 2001 only. Bill Cole and Gordon.

MR. COLE: Mr. Chairman, is there a member from Pennsylvania on the Technical Committee?

CHAIRMAN FLAGG: Heather?

MS. STIRRATT: Yes, that would be Dick Snyder.

MR. COLE: And is he aware of the TC's response; and if so, what was his response?

MS. STIRRATT: Absolutely. In fact, I would note that the most recent discussion of the Technical Committee occurred via conference call due to budget limitations and Dick Snyder was available for that conference call and did speak specifically to this issue.

Obviously, he supports Pennsylvania's request, but his support of this request was the only dissenting opinion amongst the Technical Committee members.

CHAIRMAN FLAGG: I'm going to ask Gordon first and then Fred.

MR. COLVIN: Thank you, Mr. Chairman. There's not much that we're called on to do in this management plan at this stage of the game, and initiating this relatively modest effort at a coastwide juvenile survey is one of the few things.

While I certainly read Pennsylvania's letter with sympathy, I also note that it could have been written by almost any of us, and that's the concern that I have.

My initial reaction, after consulting with staff, was that I fail to see the justification; and now that I've heard the results of the Technical Committee's near unanimous recommendation, I feel more strongly about it.

I'm just not sure how that request would be justified without similarly exempting any of the states who felt that they could not muster the resources to do it. Frankly, if we get to that point, we may want to talk about why we have this management program.

CHAIRMAN FLAGG: Thank you, Gordon. Fred.

MR. FREDERICK S. RICE: Dick Snyder and Pete Colangelo both have briefed me on this problem and it's the intention, regardless of what the decision is, they're not going to do it.

However, we would not like to be placed in the position of being embarrassed by being out of compliance, even though we don't have a fishery. Now, I think Pete makes some good points.

When you talk about Pennsylvania having a shortfall -- and I'm sure, Gordon, you don't have it -- \$75 million shortfall in Pennsylvania, and we have a brand new fishery coming up the Susquehanna with the shad and striped bass.

Eel is not one of their priorities and Dick Snyder feels that the other species are much more important. However, I wanted to know what is the penalty if you don't have a fishery? That's one of my questions because maybe there is an alternative.

I understand, however, that if you don't have a full effort on sampling, it's not worth doing it. I don't think there's a halfway avenue of approach to it, but I'm not technically qualified to know the answer to that. Thank you.

CHAIRMAN FLAGG: A.C.

MR. CARPENTER: Mr. Chairman, I understand where Pennsylvania is coming from on this, and I know that we are a good ways from the coast, and it took us a couple of years to figure out how best to do the Potomac on this.

My question, I think, is related -- and part of my decision is going to be based on the fact that can somebody tell me -- I'm almost certain that the Delaware state survey site must be in the Delaware drainage.

Is the New Jersey Elver Young of Year Survey site located within the Delaware basin or is it within some other basin? It is coastal. I just got the answer to that.

So, I think if Delaware's site is within the drainage, we may have at least some information on that part of the region, and I think Maryland has one in Ocean City, don't you, or along the coast there? So, thank you.

CHAIRMAN FLAGG: Thank you, A.C. Kelly.

MR. KELLY PLACE: Yes, if I'm correct in assuming this will be the second year that Pennsylvania will have an exemption from their YOY study, I'd protest pretty vigorously, because if we're moving toward multi-species management, as important as eels are to not just the ecosystem of the bay and the coast, but worldwide, I think two years in a row of a gap in the YOY survey would be an unacceptable gap in terms of how important it's turning out that eels are.

While I sympathize with their budget constraints, as Gordon said, we all have those constraints and I think that the cost of that program is relatively modest compared to others, and I would object pretty strenuously. I don't know how our state will vote, but I think that's an unacceptable hole in the data train of a very important species.

CHAIRMAN FLAGG: Thank you, Kelly. Just a clarification, my sense is from the letter from Pennsylvania is that they want to be exempted from this requirement not just for next year, but in perpetuity.

So, it's not just one year that we're talking about in terms of an exemption. It would be to exempt them from that particular element of the FMP.

MR. PLACE: Underline my objection, then. Thanks.

CHAIRMAN FLAGG: Paul Perra.

MR. PERRA: I think I can answer Fred's question about what the penalty would be if there's a non-compliance and the Commission reported it and the Secretary conferred. There would be a closure to the fishery.

In Pennsylvania you couldn't catch eels commercially or recreationally and probably no effect, really, on the fishery or the fishermen.

But if you're trying to avoid work for the Division of Fisheries and the National Marine Fisheries Service, I guarantee you we will spend three to four times what the monitoring program would cost. Probably you'll have the governor's staff involved, which no fisheries director really wants to have.

We'll have the Secretary's staff involved and a lot of effort will expended and money will be spent on this issue, much more than the cost of implementing a small little monitoring program. That will be the penalty we'll pay.

MR. RICE: I understand, Paul.

CHAIRMAN FLAGG: David Borden and then Eric.

MR. BORDEN: That almost sounded like Paul Perra was offering money. In fact, that's about as close as I've ever heard Paul Perra get to offering money.

One of the alternatives here that I think that Pennsylvania should consider is to work with some of the environmental organizations in the state to see whether or not there's a private organization that would be willing to take on this task.

We have done that in our own case on horseshoe crabs and set up a cooperative research program that has been very successful in meeting the Commission requirements and at the same time reducing the burdens on the staff.

I think that when I spoke originally of a one-year exemption, that was really in the back of my mind that there are other ways of getting this information without burdening the Pennsylvania staff and maybe those should be explored.

CHAIRMAN FLAGG: Eric.

MR. ERIC SCHWAAB: Thank you, Mr. Chairman, a question for Julie. The Technical Committee memo suggest that an offer of assistance could be put forth to design some alternative, less onerous method of meeting this requirement. Is Pennsylvania aware of that and is there any reaction to that?

MS. WEEDER: Yes, Pennsylvania is aware of it because Dick, as Heather mentioned, was participating in our conference call and we reiterated that to him.

I don't think that certainly didn't sway them in their wanting to

be exempted from it. I think it was like, well, that would be great, but we still can't do it.

MR. SCHWAAB: So they're not even interested in looking at less costly alternatives?

MS. WEEDER: Not to my awareness, no.

CHAIRMAN FLAGG: Kelly.

MR. PLACE: My last comment before I go into jumping on a plane. Pennsylvania's point of not having a recreational or commercial fishery is well taken.

But also I'd like to recall their point that they frequently make, that the Susquehanna is the main tributary of the Chesapeake Bay and the most important, in some respects, and to not have a YOY survey in the most important tributary of the Chesapeake Bay, I think would be ill advised for future ramifications. Thank you.

CHAIRMAN FLAGG: Thank you. Wilson.

DR. WILSON LANEY: Lew, I won't speak to the specific case under consideration, but I did want to advise the Board in conjunction with the later consideration of Dr. Kinser's letter and in view of what Pres said about sampling, it seems appropriate to share this information at this time.

Keep in mind that American eel is somewhat unique from a lot of the other species that are under this Board's purview because the nursery habitat for this species lies inland of the coast, for the most part.

Dieter Busch, in his former capacity with the U.S. Fish and Wildlife Service, made a very excellent presentation to the American Fisheries Society a number of years ago in Halifax, I think it was, Dieter, quantifying or making an attempt to quantify the loss of habitat of that species, and it has been tremendous.

Those of us in fisheries management agencies, the federal as well as the state agencies, have a tremendous upcoming opportunity in the form of numerous federally licensed hydropower facilities that are coming up for relicensing and I'm -- I'll use the word privileged, guardedly -- to be engaged in two major ones right now, on the Roanoke and one coming up on the Pee Dee system in South Carolina.

One of the things we're running into is the need mandated by Counsel in the Fish and Wildlife Service and the National Marine Fisheries Service to document the presence or absence of eels in these systems and the reasons for their disappearance from these

systems.

In the absence of data, it's going to prove very difficult for us to achieve the level of habitat restoration that I think all of us would like to see, not only for American eel, but for other species.

In many cases, the species for which we can best document the impact of dams on habitat loss is American eel because in most cases the states that were doing comprehensive fisheries surveys way back when assessed everything.

So, in a lot of cases, we have good historic data for American eel, but we have a lack of current data for American eel. I would just encourage you to bear that in mind.

It's going to pose a rather serious dilemma for us, I think, as fisheries management agencies, when we're put in the position of justifying fish passage measures, which we all know are going to be very costly to utilities to implement.

But if we don't do that, then we're accepting defeat right up front, I think, with regard to American eel especially, since in most cases they can't get upstream unless those passage facilities are provided; and in order to be able to justify those, we have to have both historic data as well as current data.

CHAIRMAN FLAGG: Thank you, Wilson. Bruce Freeman.

MR. FREEMAN: Thank you, Lew. Two thoughts occurred to me during the discussion. One is that Pennsylvania has been sampling on the Delaware, and a suggestion was made perhaps to change that sampling to the Susquehanna.

In so doing, there may be sampling that the state is undertaking and to piggyback this onto some other sampling may be relatively cost effective, and I'm not sure if Pennsylvania has looked at that possibility or not.

It may be something, Fred, you could take back and ask Dick if in fact they've thought about this. Maybe they have and maybe they haven't. But it may be one way of doing it.

The other thought occurred to me just from Wilson's comments is that perhaps we could become innovative and tie in the sampling that power companies are required to do on their intake to use this for sampling for eels.

I don't know if anyone has done that, but it seemed to me that would be kind of a unique and quite frankly, I think, much more robust sampling perhaps than some of the sampling we're doing in

these streams.

Now, that latter choice requires perhaps a change in the licensing, but the states now have the authority, on a five-year basis, of going back and look at licensing for the intake water for these power plants, and that's certainly something that could be done at no cost to Pennsylvania and yet supply the information that Wilson is talking about in order to get further justification of blockages, particularly relative to the spawning runs of shad and herring.

So, there's a double benefit here and it may be worthwhile, if there's a stalemate in front of us, to have the Technical Committee work with Pennsylvania to explore some of these possibilities, allow an additional year hiatus where a sampling scheme could be worked out at very low cost, or no cost, to Pennsylvania, have them able to comply with the requirements and supply the available information.

CHAIRMAN FLAGG: Okay, thanks, Bruce. I think those are very good suggestions. In fact, I think Julie wanted to elaborate a little bit on some of the comments you've made.

MS. WEEDER: I just wanted to address the point about the monitoring that I know of or the information I know of is in Maryland and not in Pennsylvania.

But certainly elver recruitment is documented at the Susquehanna Cotawingo Dam. However, there are some concerns that it may not be glass eels. It may be more developed eels, but there's an example.

In fact, in the FMP that's really the only kind of pseudo-recruitment trends that we have available, that Cotawingo Dam data as presented.

CHAIRMAN FLAGG: Thank you, Julie. Fred.

MR. RICE: Yes, I think the question should be voted up or down by our meeting and whatever the results are, I'll take back any suggestion to Pennsylvania. Thank you.

CHAIRMAN FLAGG: Fred, would you like to offer a motion to exempt Pennsylvania from the Young of the Year. We have to have a motion on the floor. I'm sorry, Bruce.

MR. FREEMAN: I would offer a motion to exempt Pennsylvania for the 2002 year, with the proviso that they work with the Technical Committee to try to find an acceptable alternative to the sampling problems that they are having.

That's the motion. Again, Fred, there's various ways this can be

looked at. One is power plant sampling, maybe something that could be referred to the Technical Committee, and take the message back to Pete and to Dick that we're trying -- as indicated, we're all having problems.

The value of this information in the future is going to be extremely useful, and we're trying to find a way to overcome the budgetary constraints but still provide the information that we all seek as necessary.

MR. BORDEN: Second.

CHAIRMAN FLAGG: Second by David Borden. Discussion on the motion? No discussion? Okay, I think we have a motion on the board and I'll read it for the record: Move to exempt Pennsylvania from Young of the Year Survey for 2002 with the proviso that they work with the Technical Committee to find an acceptable alternative to sampling problems. Yes, Gordon.

MR. COLVIN: I have a question for Bruce. Bruce, is it the intent of the motion that, if passed, the Board would expect that such an alternative would be implemented beginning in 2003?

MR. FREEMAN: That's my expectation, Gordon, yes.

MR. COLVIN: Is it possible to consider so stating in the body of the motion?

MR. FREEMAN: I would be acceptable to a friendly amendment.

CHAIRMAN FLAGG: I was going to say I think there is some need to perhaps clarify that a little bit in terms of specifying that the alternative would meet the requirements of the annual Young of the Year Survey. I think we do need to have that in there so that it does, in fact, address the need for that particular element.

MR. FREEMAN: That's acceptable as well, Lew. My expectation was dealing with the Technical Committee, that they would make those recommendations. But if you want to include it in the motion, that's perfect.

CHAIRMAN FLAGG: I think as long as it's understood that that's the direction of the Technical Committee, I think that's fine. Are there any other discussion on the motion?

Okay, we'll read it again here. The perfected motion is: Move to exempt Pennsylvania from the Young of the Year Survey for 2002 with the proviso that they work with the Technical Committee to find an acceptable alternative to sampling problems, the intent being that the alternatives would be implemented in January 2003.

Okay, I think we're there. It's a moving target. Any further discussion? Let's take thirty seconds to caucus.

(Whereupon, a caucus was held.)

CHAIRMAN FLAGG: Okay, I think everybody has had an opportunity to caucus. All those in favor of the motion, please signify by raising your right hand; those opposed, one; null votes, no null votes; abstentions, no abstentions. The motion carries. Oh, I'm sorry, we had two abstentions, Fish and Wildlife and National Marine Fisheries Service.

MR. FREEMAN: I would add, Lew, that if, in fact, Pennsylvania still has a problem, I think Paul would volunteer one day a week to get out of the office to do the sampling himself.

CHAIRMAN FLAGG: Would you like to respond to that, Paul?

MR. PERRA: Absolutely.

CHAIRMAN FLAGG: At this time, the next item on the agenda is the Stock Assessment Subcommittee report, and I believe Julie will be giving that report.

MS. WEEDER: The Stock Assessment Subcommittee met for the first time in Maryland on July 30th and 31st of this year. You already know who I am. Laura Lee was elected Chair of the Stock Assessment Subcommittee. She is an employee of ASMFC, specializing in fish stock assessments.

We met with a few objectives. First, we wanted to figure out what kind of data was available to assess American eel and this would be specifically for stock assessment approaches.

Then we needed to figure out what exactly would be needed for each of the approaches that we evaluated, and then we wanted to come up with some directions to go for the future. Let's just talk about the data end of things first.

This table is in the materials that you were sent. It's towards the end of the Stock Assessment Subcommittee report. Basically, it outlines the methods that we looked at, which were identified by Laura as the major traditional methods that are used in fish stock assessments pretty much everywhere.

On this column here, you have the typical data type that might be needed as input to these models. So, you have things like fishing mortality, abundance, growth, catch-per-unit effort, and then here you have the different methods.

There's the biomass method, a couple of life history approaches, VPA based on age or length, and catch-at-age model, also based on age or length.

Where you see a light gray or dark gray, that means that type of data is required for each of these methods. If it's a dark gray, that means that the data is not available at all. So, you can note that for each method, there is one type of data that is not available.

The first thing to get from this is that we don't have enough data to use any of these methods. The second thing to note is that even where we have an "A", which means available, always that data is only from possibly one or two places.

So, it is not spatially representative and the committee does not feel that it's sufficient for any kind of a coastwide assessment. As you recall, eels, of course, spawn together in the Sargasso Sea. Their larvae drift randomly over the entire coast, ranging from Greenland to South America.

There is no evidence of any sub-populations occurring. Even though they have this huge range, it's critical to manage them on a species level. It's important for you to keep that in mind when we're trying to figure out how to approach this.

However, as I mentioned, even though we need to manage on a species level, the data available is strongly skewed. There's very little of it, but what there is is usually in a couple areas, the Mid-Atlantic.

Sometimes, there's something in Maine, sometimes, there's something south of that. There are some things in Canada. But it's certainly not spatially representative, and I think we'd all agree that if you have a fishing mortality rate from Maryland, you don't want to automatically assume that it will work in Nova Scotia or in Florida.

So, the committee concluded then that the data is insufficient for any reliable stock assessment at this time, which we were just made to see, but we weren't altogether surprised.

So, after this discouraging news, which we are finally saying as the committee, which really needs to address this ultimately, we need to think about where to go from here.

As I explained, there is basic data that is needed for these different approaches, which are recognized as appropriate for stock assessment in a quantitative manner. We don't have that information and, of course, until we start collecting that information, we're never going to have it.

So, we don't want to end up in the same situation five years from now that we're in now. That said, in the interim, until we have the decent data, what we're going to do is try to look at some non-traditional methods to use with those very little data that we do have to come up with some more qualitative general trends that perhaps we can talk about.

That can give us possibly some general targets and that would be used until we get more representative data, which we want to emphasize is necessary right now.

The question was what is a BRP. A BRP is listed on the slide. That is a biological reference point. That would be something like FMAX or F.1, levels of fishing mortality or levels of biomass or levels of maximum sustainable yield that are either targets or limits.

So, it would let you know if you are exceeding the safe limit or if you are approaching it. Certainly, the BRPs that we're talking about probably would not be as quantitative as something like a fishing mortality rate.

They may be something more like a general statement that F needs to be equal to M. Fishing mortality needs to be equal to natural mortality. That's just one thing that has been stated from European eel literature.

Does that answer your question? So, like I said, we've got to get that data eventually and the sooner the better. The first thing that needs to get done is really to identify exactly what data we need. That gives us a course of action to figure out how to get it.

As it's been discussed in this meeting already, I think we all recognize from the report and possibly what we already knew, that we absolutely have to collect more data. Now which kind of data, as I said, the Stock Assessment Subcommittee did not quantify at this time.

Their first meeting was designed to figure out generally what models might be appropriate, what data was available, and the report goes into great detail about the different methods and what we would require for each one.

It's important to note that we don't necessarily know right now which method we want to use, because we don't have the data to use it for.

So, we wouldn't necessarily say, like in the report you might have noted that the biomass method possibly -- there might be enough

data in the future to use that and maybe not.

But we don't want to just assume that the biomass method, for example, is the best one because that's the one we have the data for first.

That's why we need to look at the whole of the type of data we would need to really just assess this population, and we're not necessarily wanting to focus on this method or that method. We've done that now. We've evaluated the different methods and now we really need to turn our attention to the data needs.

So, we have this stock. We don't know the status. We don't know what's going to happen in the future, of course, and we can't even predict what would be a problem point. So, we need to adopt that precautionary approach, which was discussed earlier in the meeting.

This has specific definition from ICES. This doesn't just mean that we're being careful and that's where we leave it. As was discussed in the meeting, there are specific protocols. They've written numerous documents about this.

So, we recommend that that approach be adopted by the Commission. Because the species ranges over such a wide range, obviously, if we're just looking at ourselves, we're missing two-thirds of the range.

So, it's really critical for us to go towards an international management strategy. I want to note that Canada is the partner that we've been working with most. Unfortunately, there is no representation, right at this point, from anybody south of the United States.

That's because, to our knowledge, there is no regulatory agency that we could talk to. There's no contact that we can make. There's some anecdotal evidence that there's fishing occurring, but beyond that we really can't go any farther when we go south because we have no mechanism for doing so.

But certainly, it's important to note that right now we need to start talking about international management and we don't want to be continuing to just look at what we've got. So, if you just take home a few points, these are what they are.

The first one is the good news that we've begun efforts to develop a stock assessment. This is something that we've been, you know, wanting to do for many years now. This is a really good thing. The committee was very happy to be able to get together and make this first step.

However, our main point that we found out was that we didn't have

enough data to do that assessment that we all recognized as really important, and that additional data is needed. I will drum these points again and again. We need to emphasize this international management as a priority. And with that, I'll take any questions. Thank you.

CHAIRMAN FLAGG: Are there questions of Julie? Yes, Dave Borden.

MR. BORDEN: Thank you, Mr. Chairman. In terms of the international component, to what extent are like the Canadians gathering information that's equivalent to our information so that at least you have that component stock?

MS. WEEDER: That's a very good question. Canada, I should note, has been concerned about eels, I think, as a country probably longer than we have. However, they haven't necessarily had a lot of money dedicated towards it, any more than we have.

They don't have a commission like we do that would be interprovince. However, there are very many dedicated people that are involved in Canada. There are some discreet Young of Year Surveys that are going on in Canada.

Their protocols probably aren't the same as ours, but that's not a problem because all we really care about is the trend within a site and not necessarily comparing between sites.

In terms of fishery regulations and things like that, monitoring and such, they're certainly different than we are. But they're very much aware of the issues and they're very concerned and dedicated to them.

CHAIRMAN FLAGG: I was going to add too, Dave, that they do have a pretty good regulatory system, and I think their commercial catch data is pretty good. They cover that pretty intensively.

They have a very large silver eel fishery in the Gulf of St. Lawrence, along the St. Lawrence River, and they have a very long-term dataset for the St. Lawrence in terms of out-migrating silver eels, and, of course, that has been declining fairly substantially over time.

MR. BORDEN: Yes, I realize that and I was just thinking about the possibility that we could request the National Marine Fisheries Service to make a government-to-government contact with DFO and basically ask them to institute some of the fishery-independent surveys that are critical.

MS. WEEDER: Can I just make a comment there? The ICES meeting that Heather talked about that Vic and I attended last year was really -- as I understand it, the way that the ICES process works

is that the governments ask ICES to evaluate a particular issue and then ICES takes action.

So, the government of Canada and the government of the United States did agree on this issue to have an ICES meeting specifically for American eel.

So, that was a very good first step and it's probably getting at some of the things that you're talking about, although they did not address trying to get more changes in the regulations.

It's important to note, too, that when we talk about ICES, while there is an American eel component of that, unfortunately, there are no plans in the future to carry out additional meetings due to budget constraints.

However, the European eel ICES meetings are much more established. They've been going on for a number of years and they meet, I think, pretty consistently every year.

So, even though we're talking about a different species, obviously there's a tremendous amount that we can gain from being involved in the European ICES components because they can give us a lot of guidance on a species that's certainly biologically similar to our own.

CHAIRMAN FLAGG: Yes, A.C.

MR. CARPENTER: Julie, given that all eel consumption or eel use or removals are pre-spawning eels in this particular situation, the idea of conservative or risk-averse management or cautious approach, can you elaborate on that a little bit?

MS. WEEDER: Sure. Certainly, regarding the silver eels, one possible management approach might be not to limit -- there could be no fishing and every eel had to escape, but to really set limits on the number of spawners that were needed in order to sustain the population.

Basically, you need to look at spawner biomass or spawner abundance and that might be one approach. Now, I'm not quite sure where you were going with the second part, where you were asking me to elaborate on the precautionary approach?

MR. CARPENTER: Yes, whether we take an eel as an elver or an eel as a yellow eel or as a silver eel, it's one less that has added to the spawning potential of the stock.

MS. WEEDER: That's right.

MR. CARPENTER: Our Commission just went through a very exhaustive

public hearing and debate over mesh sizes on eel pots, and it all boiled down to being an economic issue and not a biological issue. I need to figure out how the conservative or risk-averse approach is going to be adapted to a species that has this particular life history.

MS. WEEDER: Sure. It's my understanding that the precautionary approach doesn't necessarily recommend specific management actions. Like, it wouldn't say that you want a particular size limit across the board or they wouldn't say you want particular limits. I think what you're getting at is more of a vision, where you recognize that you need to have the risk-averse approach.

You recognize that you have certain reference points that you don't want to exceed. Now, how you would deal with those particular limits would probably vary from place to place.

Certainly, the committee has not addressed what a size limit would do and so on. Possibly, what could happen is that if the Board recognizes and agrees with this idea of the precautionary approach -- just a suggestion -- the Technical Committee could be asked to figure out how to apply that precautionary approach on a state-by-state basis and to really look at exactly what ICES suggests and what they don't suggest and to figure out specifically how to implement that.

CHAIRMAN FLAGG: Other questions of Julie? One of the things that we should discuss is with respect to the Stock Assessment Subcommittee report, they've made some recommendations on some various approaches that might be taken to provide data that would allow us to do a stock assessment, and there are several basic approaches.

They've been handed out earlier in your documents on American eel, and we might want to discuss a little bit about whether or not we want to consider developing an addendum that would address data needs necessary to establish the data necessary to complete a stock assessment.

I know this is going to be a very weighty issue for all of us because it will require additional work on the part of each of the states to attempt to collect this kind of data.

So, I'd like to have some discussion about how this Board feels relative to how we might proceed in terms of looking at additional data requirements. Yes, Gordon.

MR. COLVIN: Well, some of that has already been said, but one point that I wanted to bring up that might be helpful, particularly if we can identify some projects that would help us that were relatively self-contained and we could get in, do them,

and get out; something like perhaps a historic assessment of coastwide powerplant fish lift/fish ladder data.

One of the vehicles that we might want to look to is the funding available to states this year and presumably next year in double the amount under the wildlife appropriations.

I know that one of the projects that New York is developing for that funding, what was referred to last year as the CJS funding, will, in fact, look to initiatives for conservation management of species of fish and wildlife that we have not traditionally addressed through our traditional fish and game and endangered and threatened species programs.

Eels are on the list of candidates for that program in the future, and I would wonder if other states might be able to look to the same funding source; again, considering that it's something that we could do that would be self-contained.

It could be a multi-year project, but I think the Fish and Wildlife Service has indicated that projects of -- we'd have about up to about three years to obligate that money and then even longer to spend it. So, we can look to a multi-year approach. We can't look to something probably that's continuing.

CHAIRMAN FLAGG: Other comments? Yes, A.C.

MR. CARPENTER: Well, Lew, I'm a little bit confused. Based on the matrix that was put up there, I'm not sure that we even have enough to begin to figure out which direction to go until after the Technical Committee and the Stock Assessment Subcommittee has had more time to really give us a direction, because right now the only direction I can see is with a shotgun and I'm not sure that we need that approach.

CHAIRMAN FLAGG: Julie.

MS. WEEDER: I could suggest the approach that we take is to focus our attention on the data that is needed and really have the Technical Committee specifically address that and could be the direction we go in for however long until we have some data.

But you're certainly correct that there isn't enough now, but as I mentioned, we might be able to use some non-traditional approaches to give us some general targets and that might give us something to work with in terms of the precautionary approach.

CHAIRMAN FLAGG: A.C.

MR. CARPENTER: Yes, but, Julie, I'm not sure that I had the feeling that you knew which data we needed to collect, other than

the data that's already specified in the management plan. Is there something else that we need that the committee is ready to recommend to us?

MS. WEEDER: Sure. Certainly, you saw in the Stock Assessment Subcommittee report that there were specific recommendations for different methods.

They would say for a particular method we need length data and some of the language was different. It would say the states should collect length data versus states must collect length data. I didn't get into that in detail because I knew that you guys had it to read, but it's important to see that that's one thing that they can look at.

However, in my opinion, one direction that we could go is to direct the committee to look at specifically what types of data they might recommend that we collect, which ones are of absolute priority, and really get more specific than our first meeting did.

The first meeting was really not intended to be able to give specific quantitative information. So, I think perhaps in the next meeting, we would be able to get to that point.

CHAIRMAN FLAGG: Heather.

MS. STIRRATT: Just to add on to what Julie has just said, certainly this paper presents the classic, the traditional type approaches to stock assessment, and as Julie has noted, the Stock Assessment Subcommittee fully intends upon exploring other methodologies.

However, to your point and your question directly, A.C., in the report we do note what is required by the FMP and for each methodology what would be additional requirements.

Let's take, for instance, just to provide you with an example, for the very minimalist level of stock assessment that we have explored thus far, that would be the biomass dynamic modeling type approach. Currently, the data which we have available would be total catch.

We have effort data. In some situations we have effort data. We do, or we are hopeful that we will have abundance indices through the Young of the Year Survey. Most of the states do have trawl surveys, where either they are catching eel by bycatch or some other method.

We do have states where the fresh water agencies are performing electroshocking. We are able to access data from powerplants and fishlift-type operations and certainly we can pull some information from the Canadians relative to their electroshocking.

What is required for biomass dynamic modeling would be time series data. Obviously, that's where we're going to see some lacking substance. Again, as Julie noted, we may have time series data for the mid-Atlantic.

We may not have that time series data for other areas, and it goes through in the report the other elements which are required. I would note that under the FMP, in Section 3.4, it does require the states to report annual harvest and in Section 3.1.2 it recommends that states report CPUE.

In other words, you should report it, but if you don't have it, you don't have it, and that's okay. In order to do some of these stock assessment methodologies, that's an absolute must have.

So, certainly, that would be something that would have to be adjusted in the FMP to make it more of a hard, binding requirement, a compliance element, if you would, to make sure that that information is provided in years forthcoming.

Certainly, the Young of the Year survey is a compliance item and is currently ongoing. I would also note that the FMP is a little bit lenient where it requires the states, or it actually says the states should report on their fishery-independent surveys, whereas we all know that that type of information will be absolutely vital for stock assessment purposes.

So, again, I'm not trying to sound like an advocate, I'm just trying to point out that we do have significant gaps in the data that we have available right now, and in order to ensure that we will have this type of data in the future, the FMP will likely have to be amended in terms of its monitoring requirements.

That said, it is completely understandable that this is probably a very low priority species at the state level. Understanding that the states are going to be very limited in the resources, probably more so than they have in previous years, following the September 11th events, this is something that this Board is going to have to struggle with in terms of the tradeoffs and a balancing type effect.

But I bring this report to you now and Julie and the subcommittee brings to you now, so that when that five-year trigger comes up for American eel to have a stock assessment done, there's no question that the Stock Assessment Subcommittee came before you and informed you that there are significant data gaps available right now; and if we're going to change that, we need to start now.

MS. WEEDER: A.C., after your question, I was thinking about it a

little bit more and you can get -- when you read the Stock Assessment Subcommittee report, as I said, there's different language in there for different methods, should or must and that sort of thing, but the general types of data that we talked about that were extremely lacking were size data and age data.

And we identified that size data alone could be very useful for some of these methods. So, I know that a lot of people are put off by the idea of collecting age data because it's very labor intensive compared to, say, measuring an eel.

So perhaps the Board could consider encouraging or requiring states to collect size data as a first step, and that way we could use that to estimate some things we need, and age data would be another possibility.

So to just generally give you an idea, that's the type of recommendations that would likely come out, based on what the report says right now.

CHAIRMAN FLAGG: Yes, Ernie.

MR. ERNEST E. BECKWITH, JR.: Thank you, Mr. Chairman. Julie, I've been listening to what you've said, and I know we have some problems, but I'm trying to put in context some of the comments you've made and try to put that into a strategy or some kind of plan of action.

Let me run something by you. I don't know if this makes sense to you, but based on what I'm trying to strain out what you said, this is where I am with it. It seems to me one of the first things we have to do is really determine what data we have.

I don't know if you've already done that, but I know we have some data in Connecticut, and I'd be happy to make a list of the kinds of very specific data we have.

Then you also talked about BRPs, and it seemed that these would be an interim kind of measures that we could use for management until we get the data we need to do a stock assessment.

So, I could see us selecting some of these interim BRPs for management, and then we would probably have to identify which of the stock assessment methods that the committee has looked at is most likely for us to utilize in the face of the data we have and the probability of getting future data.

Once you select a most probable method, then you determine what specific data you need to do that assessment and assign time frames to all of those things. Does that make sense to you?

MS. WEEDER: Sure. Well, actually a lot of the things that you mentioned were addressed and accomplished, I think, at the committee meeting.

One of the main objectives was to identify the type of data that's available. I should mention that there's an additional effort, and one of the things that's mentioned in the report is to compel -- well, not compel, but to ask the states to please make a listing of every type of data that they have that could be useful.

I personally know that this has been asked in years past and things tend to trickle in. I think it's safe to say, though, that the major types of data that were talking about, time series, effort data, size data, age data, I don't expect and probably the committee doesn't expect to see anything leap out at us that's going to fill a major gap.

So we've identified that the data that's available in general that we would need for these basic models is not there, and I want to emphasize too that even though it might be great in some places, it just doesn't exist in others.

Since we're advocating a species approach to this, it's really not adequate. So, obviously, everybody has gotten the point that it's not adequate.

And to address your biological reference points question, the way that I talked about it in there was an interim solution. Ultimately, once you have a good assessment that's based on very good data and is very reliable, certainly those assessments include biological reference points as a critical point.

Really, what you would be striving towards is to have those quantitative levels. However, the interim solution would be to give us some general idea of what those reference points might be.

So, what we're trying to emphasize is that we might be able to use some non-traditional methods to use the data that we have, but that's not going to give us a quantitative biological reference point.

And then you mentioned also identifying the methods that we would be most likely to use and what data was needed. Basically, the way I see this going, what would be best, and I think the committee would agree with this, is that we have addressed the point, more or less, of figuring out what data we needed.

We've addressed the point of evaluating the main models that would be used and figuring out that they aren't going to work for us right now. We've identified that we might be able to come up with something based on the limited data we have in a qualitative way. So, the thing that really needs to happen now is we have to identify specifically what data is needed, to probably prioritize that data and then have the Board act on trying to get that data collected. Does that answer your points, more or less?

CHAIRMAN FLAGG: It seems to me that maybe one of the ways to deal with this, too, is that it might be appropriate to have the Stock Assessment Committee continue to work with the Technical Committee on this issue because I think what we really need is we need a matrix with each state listed with what each state is doing relative to eels and how that fits into the stock assessment.

And what are the gaps in that particular state so that each director has some sense for what resources might be necessary in order to meet the minimum data needs to develop the stock assessment. So I think really that's where we need to go. Julie.

MS. WEEDER: In your report, I should mention that the table that I put up there only included data that would be appropriate for a species approach.

However, if you look at the back of the report, we actually have the matrix broken down by several spatial approaches. There's a coastwide approach, a regional approach and a state-by-state approach.

Now, in the state-by-state approach, when we evaluated this initially -- well, I should back up. One of the first things we considered in this meeting was what spatial scale we wanted to talk about, like if we would do a stock assessment for each individual state or for a particular regions or for the whole species.

We determined that since there's no evidence of any biological sub-populations and any kind of distinctions between groups would really be based on types of data available or state lines, there's really no justification for doing anything other than a species approach.

However, when we presented the information that we came up with in the report, we ultimately agreed that the coastwide approach was the one we needed to go with.

However, to address your point, Lew, the part where it says state by state and has available or not available, in the report there's specific information about particular states that have particular things. So we really have addressed that, even though I didn't go into detail in the presentation.

CHAIRMAN FLAGG: Okay, thank you. We are running out of time, and

we do have one other very brief item. I don't know what the Board's pleasure is at this point relative to what direction we give to the committee. Yes, Heather.

MS. STIRRATT: Understanding that we're under time limitations for today, what I would offer up is that staff would go back and work in consultation with the Stock Assessment Subcommittee and the Technical Committee to make a very clear, one-page outline at our next meeting, which hopefully would be early next year, that would identify very clearly to Board members exactly what we need to take action on relative to data elements and additional monitoring requirements in the plan. Perhaps, that would be a better directive to the Board in terms of making a decision at that time.

CHAIRMAN FLAGG: Gordon.

MR. COLVIN: I think that would be very helpful if we could receive what Heather suggested. It would be most helpful, frankly, if we could receive it well in advance of the next Board meeting so that we have an opportunity to work with our staff and factor it into our overall planning and budget situation development.

CHAIRMAN FLAGG: Thanks, Gordon. I don't know if we have time to deal with the letter. Okay, we don't have time. We will defer that item. I'm going to declare the meeting adjourned.

(Whereupon, the meeting adjourned at 4:10 o'clock p.m., October 17, 2001.)

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