

**PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
SHAD AND RIVER HERRING MANAGEMENT BOARD**

**Crown Plaza Old Town
Alexandria, Virginia
February 4, 2009**

Approved May 6, 2009

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INDEX OF MOTIONS

1. **Approval of Agenda by Consent** (Page 1)
2. **Approval of Proceedings of October 23, 2008** by Consent (Page 1)
3. **Move that the chairman establish a subcommittee for the purposes of developing more specific options, including some basic level of resource protection that all states would be required to adopt; that they look at definitions of what constitutes a sustainable fishery and excessive bycatch; and that they report back to this board at the next meeting in May** (Page 25). Motion by Jack Travelstead; second by Pat Augustine.

MOTION REWORDED ON PAGE 29: Move that the chairman establish a subcommittee to meet with the PDT for the purpose of developing more detailed options, including a basic level of resource protection that all states must adopt, as well as definitions of what constitutes a sustainable fishery and excessive bycatch, to be reported on at the May Meeting Week. Motion carried unanimously on Page 30.

4. **Motion to adjourn by consent** (Page 13).

ATTENDANCE

Board Members

Terry Stockwell, ME, proxy for G. Lapointe (AA)	Bernard Pankowski, DE, proxy for Sen. Venables (LA)
Sen. Dennis Damon, ME (LA)	Mike Luisi, MD, proxy for T. O'Connell, MD (AA)
Pat White, ME (GA)	Bill Goldsborough, MD (GA)
Doug Grout, NH (AA)	Russell Dize, MD, proxy for Sen. Colburn (LA)
Rep. Dennis Abbott, NH (LA)	Jack Travelstead, VA, proxy for S. Bowman (AA)
G. Ritchie White, NH (GA)	Ernest Bowden, VA, proxy for Del. Lewis (LA)
William Adler, MA (GA)	Michelle Duval, NC, proxy for L. Daniel (AA)
Paul Diodati, MA (AA)	Mike Johnson, NC, proxy for Rep. Wainwright (LA)
Najih Lazar, RI, proxy for D. Gibson (AA)	Bill Cole, NC (GA)
David Simpson, CT (AA)	John Frampton, SC (AA)
Lance Stewart, CT (GA)	Robert Boyles, SC (LA)
James Gilmore, NY (AA)	Malcolm Rhodes, SC (GA)
Pat Augustine, NY (GA)	Spud Woodward, GA (AA)
Tom McCloy, NJ, proxy for D. Chanda (AA)	John Duran, GA (LA)
Tom Fote, NJ (GA)	Bill Orndorf, FL (GA)
Gil Ewing, NJ, proxy for Asm. D. Fisher (LA)	Bill Sharp, FL, proxy for G. McRae (AA)
Eugene Kray, PA (GA)	Bryan King, DC
Bill VanDusen, PA proxy for Rep. Schroder (LA)	A.C. Carpenter, PRFC
Leroy Young, PA, proxy for D. Austen (AA)	Steve Meyers, NMFS
Roy Miller, DE, proxy for P. Emory (AA)	Jaime Geiger, USFWS

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

Ex-Officio Members

Bob Sadzinski, Technical Committee Chair

Staff

Vince O'Shea
Kate Taylor

Bob Beal
Chris Vanderweidt

Guests

Dr. Matt Cieri, ME DMR
Craig Shirey, DE F&W
Gary Nelson, MD DNR
Pam Lyons Gromen, NCMC
Jed Brown, DC F&W
Brooks Montcastle, MFCN
Frank Kearney, CCA-VA

Jeffrey Pierce, Dresden, ME
Lara Slifka, CCCHFA
Patrick Parvette, Hyannis, MA
Pat Keliher, ME DMR
Arnold Leo, E. Hampton, NY
Joe Fletcher, McLean, VA
Bonnie Bick, Mattawoman Watershed Society

The Shad and River Herring Management Board of the Atlantic States Marine Fisheries Commission convened in the Presidential Ballroom of the Crowne Plaza Hotel Old Town, Alexandria, Virginia, February 4, 2009, and was called to order at 10:00 o'clock a.m. by Chairman Paul Diodati.

CALL TO ORDER

CHAIRMAN PAUL DIODATI: Welcome to the meeting of the Shad and River Herring Management Board. We're scheduled until 3:00 p.m., and there will be a lunch break. We have a lengthy agenda today with a goal of a final action to approve Draft Amendment 2. I know that there members in the audience that will probably want to be speaking on some of the issues. I am going to make time for that both at the start of this meeting and perhaps later on as motions are made.

APPROVAL OF AGENDA

CHAIRMAN PAUL DIODATI: Are there any changes to the agenda; do any board members have any questions or changes? There are none.

APPROVAL OF PROCEEDINGS

CHAIRMAN PAUL DIODATI: Do we have an action to accept the minutes of the last meeting? The minutes are so moved and are accepted.

PUBLIC COMMENT

CHAIRMAN PAUL DIODATI: We will take a moment now for anyone in the audience that would like to make any comments to the board before we start our business. Go right ahead.

MS. PAMELA LYONS-GROMEN: I am Pamela Lyons-Gromen with the National Coalition for Marine Conservation. We're based in Leesburg, Virginia. I just had a comment. Looking at the agenda for later this afternoon, it looks like the Policy Board has developed a working group to look at alignment between state and federal issues.

The scope of that at this point doesn't look like it is going to the species level, but as we look at American shad, blueback herring and alewives I think looking at the federal waters and our impact in federal waters, where these species spend most of their lives is very important, and coordination and collaboration and alignment with the federal council is also important.

We had a New England Council motion which was passed in October, which we applaud them for, to

collaborate as much as possible with the ASMFC and the Mid-Atlantic Council regarding the management of the river herring resource. We feel strongly as the agency in charge of managing river herring that the ASMFC should take the lead in this type of collaboration.

Unless there is some kind of forum or format or concerted effort to make that collaboration happen, it is hard to see how it will. We just feel like there should be subset maybe of this management board that works with the federal councils and NMFS and to collaborate on any issues in federal waters that impact these species. Thank you very much.

CHAIRMAN DIODATI: Thank you for your comment; it is an interesting idea.

MR. JEFFREY PIERCE: My name is Jeff Pierce. I'm with the Alewife Harvesters of Maine. I would like to thank the board for letting me speak. We're going to reserve comment for later but we hope we can help out with any information or technical knowledge that you might not have. Thank you.

CHAIRMAN DIODATI: Anyone else? Okay, thank you. We're going to have an update on the stock status. Gary Nelson.

UPDATE ON RIVER HERRING STOCK ASSESSMENT

DR. GARY NELSON: This year was the first year since 1990 that a stock assessment was begun on river herring along the east coast. We basically spent this year just trying to figure what kind of data we had and had the states assemble what data they had and make it make available to the stock assessment committee so that we could start doing a stock assessment, which is due in 2012.

There are ten members along the coast and we had a lot of help from Kathy Hattala from New York, and Pat Campfield and Kate Taylor were also very helpful in the process. What happened this year is we had a meeting in July in which people got together and brought the data to the table, and we reviewed a lot of it through the meeting.

People from states threw out some of their own data. They didn't think it was of high quality so some culling did take effect. Then we asked the states to put together state reports on how they thought their state resources were doing. Then we received all those reports in September, and then the committee took the data and compiled it into a coast-wide

summary report, which is the first section of that 600-page document that is available on the CD.

What I am going to go over today is just some of the summary and some of the results that we came up with. This isn't a full-blown assessment. We are not offering any type of management suggestions at this point. This year was just to get the data together to see what we could find, and I just wanted to show you some of the patterns that we found in all the data that we have.

Our first objective for this year since we only had four or five months to do was simply to try and describe all the trends in some of the data that we had ranging from the historical landing stuff to actual estimates of run sizes and some of the biological data. We did a bunch of different things, looking at correlations among state runs and things like that.

We did some cluster analysis to try and identify comment patterns. We used some methods to try and determine whether we can actually detect trends in some of the data. Then we did some basic population rate estimates. We came up with some mortality estimates using both age-lengths and repeat spawner-based data. I will show you some of these.

Just to remind you, our goal wasn't to identify any of the factors that are contributing to these trends. Our first cut is to just look and see what trends we have. There were seven types of data. We had historical and current commercial landings' data. Some states had commercial CPUE data. We looked at the MRFSS data.

A bunch of states had run size estimates for different rivers within the state; young-of-the-year indices of relative abundance from seine surveys. There were a bunch of other surveys from other gears like gillnets, electrofishing surveys that we had. Then we had a biological data from fisheries-independent and fisheries-dependent sources. I will just start with the commercial data. We assembled most of the data from historical documents, particularly the 1985 FMP on River Herring.

They had a lot of the historical domestic and foreign landings that occurred back in the sixties, so we assembled those. We also updated it using the current MRFSS estimates that are on the website. States also had updated records. Even though we're presenting all this harvest, one thing we noticed at the meeting was a lot of states do not record any type of harvest that is used for bait from the different states, particularly like in Massachusetts two towns actually

keep track of what is being removed, so the landings we're presenting are probably an underestimate of what has been taken.

This first graph – this is in the document – just shows all the historical data by state. These are just domestic landings. These are for river herring in quotes, meaning it is combined species. This is a stack graph so it shows the contribution to the total that is made by each state; and if you want the total, you just look at the top line here.

Domestic landings, we had them from 1887 to 2007, and all the data I'll be talking to you about today is just through 2007. It didn't included 2008. People didn't have the data ready for the document. The majority of landings came from Virginia, Massachusetts and North Carolina. They were some of the bigger contributors. After World War II the landings increased and they peaked in '58 and 1969 at about 74 million pounds.

After about '69 they started to decline. There is a little bump here back in the mid-eighties, but they have since declined and less than about 2 million pounds are harvested now annually, so a pretty dramatic drop. Here is just a graph of showing domestic, comparing it to foreign landings from 1950 to 1980. The white here is the foreign landings.

If you combine the two together, the peak landings occurred in 1969 at 141 million pounds, but then right after that most of the landings started to drop, and then the foreign fleets were basically kicked out in the late seventies, early eighties by the EEZ establishment. The commercial CPUE data, we had from basically 11 rivers and estuaries along the coast ranging from New York down to South Carolina. A lot of them came from the Chesapeake Region.

They represented data for combined species. Some states didn't separate it by species, but also there is some individual species. Even though some people believe that they might represent trends and abundance, we're not entirely sure that they do, so we need to some more further analyses to look at these.

Here are just some of the patterns we have seen. Starting at New York at the top, we have some declines in index for both species; also a decline in New Jersey, Delaware Bay. Maryland declined but kind of increased. We have some declines in the Potomac; increases in alewives in the Chesapeake Bay measured by Virginia; very little declines in the James River; kind of funky pattern in the Rappahannock River; and kind of a flat but

increasing trend for alewives in the York River in Virginia, so there are kind of some contradictory patterns here.

Here are some from further south. North Carolina is the two upper ones, showing declines in alewives and bluebacks in the Chowan River in North Carolina. In the Cooper River bluebacks were declining, and then in the Santee River this trend was shown for bluebacks. So, again, there are some conflicting trends.

But if we look at it just by species, three of the six series showed declines in recent years for alewives; two of the two series available for bluebacks were declining also and are showing declines in recent years. Then two of the three series that were available for the combined species showed declines.

We looked at the recreational harvest and releases from MRFSS, and there are just so few records and the PSEs are so high we basically deemed that they're really not useful for anything. All right, there were a bunch of states that actually had run size estimates. Most of them came from New England. Maine had five rivers; New Hampshire had six; Massachusetts had four; Rhode Island had three rivers; and Connecticut had six rivers.

Even though they were available for a lot of these rivers, the time series were so short that we couldn't look at trends in the data because of the shortness of the time series, so what you're going to see are those that were long enough that we could examine for trends. Then we had not run size estimates but we had population size estimates from the Chowan River from a stock assessment that North Carolina did back in 2004.

Then there was a mark-and-recapture experiment done from 1980 to 1990 in the Santee River. What we did here, we used this technique called "cluster analysis" to try and figure out groups in the data. What we did was we took some correlation analysis of all the different runs together and then this technique allows you to picture in two dimensions the different groupings based on that.

We identified three different groups, and these will be for data from 1983 to 2007. The way to look at this graph, these are the names of the different rivers in the groups, and you really should be concerned with this horizontal branch because that is the level of similarity. They're similar if it is on the lower part of this graph, and they're less similar if they go up.

We looked at these three groupings and Group 1 was essentially two branches. We had similar trends between the Gilbert-Stuart River in Rhode Island and the Monument alewife and – I forgot to mention that some of the rivers also are for combined species and not separate species estimates. If there are separate species estimates you will see the name attached to the river up here in the graph like Monument alewife here.

These two rivers had very similar trends, increasing from the eighties, peaked about 2000 and then had some declines after that. There was a set of rivers from New Hampshire, the Oyster River and the Cocheco River, that kind of peaked in the nineties and may have declined here. This one, again, has bounced and has dropped after about 2003.

This is a group of rivers that been declining since 1983. That's the Taylor River in New Hampshire; Connecticut River – and that's bluebacks in the Connecticut River – and then the Monument River, bluebacks in Massachusetts. Then there was a set of rivers that showed similar patterns where they declined from the early eighties down to the mid-nineties and then increased and peaked around 2004 and then dropped and some actually showed some increasing trends. These are rivers from Maine and New Hampshire, so there are similar patterns there.

We then looked at even a shorter time period to get more recent trends. By looking at a shorter period, we were able to add two rivers to the analysis, the Winnicut River in New Hampshire and the Nonquit River in Rhode Island. You can see these two big groups, but we divided it up into smaller groups because some of these things looked interesting.

Group 1, this is from '99 to 2000. Group 1 was the set of rivers that increased and peaked around 2004 and then dropped -- these are 2005 to 2006 – and have since jumped up again. I only have these odd rivers that just bounced around. Those are those two outlier groups. Then we had this big group that very similar trends where you had peaks up in 2000 and then sharply dropped. These were the Monument River alewives and Connecticut River bluebacks.

Then similar trends where you have a peak in 2000 and a gradual decline, and these occurred in a river in Massachusetts, Rhode Island and then rivers in New Hampshire. You can see those very trends where you are. Then these final graphs are just showing the population estimates and the graph above from the Chowan River, looking at both bluebacks and alewives, showing that their abundance dropped sharply after 1985.

Then this lower graph is from the Santee-Cooper River just showing that during the eighties and nineties there was an increase in the blueback abundance within the Santee River. Just to summarize this, we had a lot of run size data available. The run size in 17 of the 14 rivers declined precipitously after 1985 or after '99 and 2000 of the six rivers, and none have shown signs of recovery up through 2007.

There were five of the fourteen rivers that declined after 2004 but are showing signs of recovery, and then run sizes in two of the fourteen were variable and one may be declining, but it was quite variable. In the Chowan River, even though the stock assessment was done, from what I hear the funds are still pretty low.

The fisheries-independent seine surveys were available from Maine all the way down to North Carolina, and we did kind of the same analyses. Some of these were combined species indices like in Rhode Island, but a lot of the states had separate indices for bluebacks and alewives. We did the same thing. One of the interesting patterns was actually the species indices from the same state group were more similar, meaning that either the environment is more similar or there was an issue with the sampling, some type of correlation with the pattern that is being picked up when they're sampling.

But we looked at a few groups and these are from 1980 to 2007; very variable. This first group was from Maine. It bounced around but it had similar fluctuations and that's why they were grouped similarly. It had some flat patterns and some increasing. Group 2 is North Carolina alewives and bluebacks and actually the Connecticut River bluebacks showing pretty much a decline since the eighties.

The third group was just New York; very bouncy. There is a huge bump up in 2007, but this may be declining but it is very variable. The Group 4 and 5, which I put on the same graph, are from essentially North Carolina through Virginia, so these are all grouping out, and what you see here is not much of a decline but kind of very variable and flat over time. There might have been something here.

Then we looked at a shorter time period, which again added some more indices, one from the District of Columbia, and Rhode Island had an index of abundance that we could use. There are two big groups. This group is mainly from Virginia through

New Jersey, so there are similar patterns or there is some regional thing going on where they're coming up with similar patterns.

This group here, which is mostly New England except for the District of Columbia Index for alewives, you can tell which one by the letter. "A" is alewife and "B" is blueback. Here is the group showing four groups; again, very variable, and this is from New York; not much pattern. You have some declines in the second group from Maryland; blueback, very variable is North Carolina, but you have declines for bluebacks in the District of Columbia, and I believe is the Anacostia and the Potomac River Index combined.

Then you have this third group, which is again made up of indices from New Jersey through Maryland for both alewives and bluebacks. What is interesting here is you can see those similar peaks throughout all of the indices in some years. This is 1996 so it is probably indicating a very strong year class back then.

We have also some other years where you see the same pattern. We believe at least for some of the indices they're picking up year class strength, so they appear to be a useful measure. Group 4 and 5 are again from New England. What is interesting is you do pick up peaks here, but they're one year behind the regional indices from New Jersey and Maryland. We do pick up some of the same signals, but it is one year before.

Then this last group is showing the declines in recruitment for bluebacks in the Connecticut River and D.C.'s index for alewives. So there are some interesting patterns that we're picking up, which we would like to explore. I also wanted to look at more recent years, but when you start truncating the data it makes it hard to do any type of analysis like that.

What we did describe is just to show what has been happening since 2003. Just to summarize, three of the rivers are showing no trends for alewives, anyway, and three were showing declines, and actually one river was increasing, so again some contrasting trends. Then for bluebacks, four rivers had no trends and actually four were declining.

Just to refresh your memory, we're seeing common patterns among the indices so we're thinking in measuring year class strength, so it will be useful in any stock assessment. The second group of indices we had were for young of the year, juvenile and adult

measurements from large seine gillnets and electrofishing surveys, but we only had three.

There were two large seine surveys from Rhode Island, the Narragansett Bay and a coastal pond survey; and then Virginia had several from the Rappahannock and the James River, both gillnet and electrofishing; and then there is an electrofishing survey in the St. Johns River in Florida. I can't really say much. There is just a limited amount of data in the few indices.

We did find that the pond survey in Rhode Island picks up young of the year, and then the large seine survey in the Narragansett Bay picks up larger individuals. There is a two-year between the two, so they seem to be measuring year class strength for Rhode Island anyway. Virginia's gillnet index has been declining since 1995. Then a short time series was available for electrofishing surveys in the James and Rappahannock River for both species.

The only real pattern was this decline after about 2004, but it is kind of variable. Then the St. Johns had this massive peak at the start of the time series and then has kind of been flat since then, but there is a good correlation between the St. Johns River and the James River with blueback indices. We don't know if it means anything, but it was pretty high for the short amount of data that was available.

Just to summarize, if we look on a species-by-species basis, indices for alewife and bluebacks show declines after '95 in one river; after 2001 in one river; then after 2004 in two rivers; and there were combined species indices particularly from Rhode Island that showed peaks in year class strength, but it was kind of variable and flat over the time series.

We also have indices from trawl surveys that came from several state surveys up and down the coast and also the National Marine Fisheries Service data we used to develop regional – we split the data up into regions to look at whether they reflect abundance in the different regions, so we have coastal state programs and then coast-wide programs.

I am not going to show you all the data because there were 25 available for alewives and 24 available for bluebacks. What John Sweka for U.S. Fish and Wildlife Service had done was not use the cluster sampling, but there is this technique called meta-analysis where you look for trends – you try to come up with conclusions for trends using all the data.

Before he did that, he kind of examined the trends, and I can summarize that 11 out of the 25 trawl

survey indices for alewives showed little or no trend over time; 13 out of 24 for bluebacks showed little trend; 10 out of the 25 for alewives and 7 out of 24 for bluebacks showed declining trends through the mid-2000s, and either increased or remain unchanged. Then 4 out of the 25 for alewives and 4 out of the 24 for bluebacks showed increasing trends.

When he did this analysis, because all these different trajectories varied, he wasn't able to conclude that there is a general consensus as to the decline in all those indices over time. We still need to do a lot of work with these. There is just too many. We have to go through and validate some of these indices to make sure they can be used as an index of relative abundance.

That is some of the work we're going to do in the future is poke through those and look at things like the variation in the estimates and throw some out. We have a procedure developed in striped bass where we look at different techniques, and I am going to suggest to the committee that we adopt that to try and weed out some of the bad indices.

An interesting thing that we also did was to look at some of these indices were correlated with any of the run size estimates, particularly the index from the National Marine Fisheries Service for the New England area. There were 55 comparisons for alewife and 24 comparisons for bluebacks; and out of all those indices about 5 of them came out positively correlated with some of the trawl survey indices.

If we look at this graph here, this Offnor here, this is the National Marine Fisheries Service Trawl Survey Index for the Northeast Region versus the Gilbert-Stuart River in Rhode Island showing a moderate correlation, but you can see that they both go up. We're looking for positive correlations, by the way.

Then we had the same index, comparing it to the Monument River in Massachusetts, showing similar trends. A very strong correlation was identified between the Rhode Island Trawl Survey and the Gilbert-Stuart River. You can see that they both went up and peaked in 2000 and dropped down; also between Rhode Island and Mattapoisett River in Massachusetts and then Rhode Island and the Monument River in Massachusetts. This is for alewives.

We have some evidence that some of the trawl surveys like the NMFS might be very useful, particularly for historical stuff because these go all the way back to 1963. We have some work to do

with survey also to see if the strata groupings that we could designate optimally that we would get most of the information out of that survey, so to do some more work with that.

For bluebacks, the Connecticut River, the Connecticut Long Island Sound Trawl Survey, Rhode Island Trawl were correlated although only moderately with three rivers, so there is some promise that we could possibly use some of the trawl survey indices as historical trends in what has been going on with river herring.

Okay, then we had some fisheries-independent and fisheries-dependent length data. We will be talking about the biological data now. What we did was we looked at just changes in length structure like looking at mean lengths. Yes, questions?

CHAIRMAN DIODATI: Yes, I was going to suggest before you move into the biological data you've already covered quite a bit there. I just want to ask the board if they any questions for you on what has been covered already, because I have a few. I think if we go through the whole presentation some of those questions might get lost. Any questions for Gary so far? I will ask one. There is no evidence that indicates that there is a problem with recruitment?

DR. NELSON: Only in a few rivers like the Connecticut River, definitely, and Chowan River, and those indices from the Potomac and Anacostia River are showing declines.

CHAIRMAN DIODATI: And the increases in CPUE in the commercial fisheries, I don't know if it was the Bay, but Virginia and Maryland seemed to have those.

DR. NELSON: Yes, they're mixed though; some are going up and some are going down, so it depends on – again, we don't know for sure that these can actually be used as an index of relative abundance. We need to explore those a little bit more.

Okay, just some of the biological data, we had length data available from Maine all the way down to Florida. Again, some of the data wasn't collected for a long enough time period to be useful right now. We don't want to discourage states from collecting it. It is just we need more of it to be useful for the assessment. We will take a look at that.

What is shown here are the mean lengths for both male, which are in the black, and female alewives

from four rivers; the Monument River in Massachusetts, the Hudson River in New York, the Nanticoke River in Maryland and the Chowan River in North Carolina. As you can see here, there has been a decline in the average size at least for these three rivers here. After applying some statistical test to it, we can these were statistically significantly declining, so there is some evidence that has been a chance in the size structure.

If you look at bluebacks, there were six rivers that were available at the time the report was due that also show this decline; again, the Monument River from Massachusetts, Hudson River from New York, the Nanticoke River from Maryland and the Chowan River and the York all show this significant decline over time. We did not see any significant decline in the Santee-Cooper River data.

Since the Florida was so short, they had a paper from the seventies and then data they had been collecting in their electrofishing surveys, so we can't really say that these declined because these are actually two different gear types also. But we can say at least those four rivers available that the average size has been declining since the mid-eighties.

And if we just look at the mean length at the beginning and the end of the series the average size has declined by 13 to 45 millimeters total length, which is about a half to two inches, over time in most of those rivers. Since we had length data, we also tried to come up with some estimates of total instantaneous mortality. We would expect that if there has been in length structure maybe due to predation or some selective force we might see increases in mortality.

We applied this Beverton-Holt estimated to length data, and it required some estimates from growth curves that most of the states developed themselves and applied the information to the lengths data by year, species and sex so we had a good combination. Here are some graphs where the estimates available for each state by sex were overlaid, and there could be multiple rivers within a particular graph.

But you can see most of the trends in these length data show an increasing trend in mortality over time except for maybe Connecticut, which is a combine sex index. There is some few data; some were very variable like here from the National Marine Fisheries Trawl Survey. What is very interesting is down in the bottom graph – and this is for alewife – sorry, the graph up here is the alewife and bluebacks over here.

This is from the National Marine Fisheries Service Trawl Survey using their length data, which weren't available at the time to do the mean lengths, but John Sweka had done it for the length-based stuff. The mortality was pretty flat over time, since the sixties, but during the early nineties to almost 2000 the mortality really jumped up during that time period, but has slightly declined.

This was the trend observed over all the different areas using the trawl survey, so it shows a historical perspective. One of the issues with this type of estimator from length data is pretty sensitive to the choice of parameters from the von Bertalanffy growth curve. You can see that for New York here, at the beginning of the estimate the estimate of mortality was close to zero, which is impossible. The magnitude may not be right but it is generally the trends that usually come out okay.

We also had some age data, not a lot. We had it from Maine down to South Carolina. We looked at changes in the maximum age over time. We developed some age-based Z estimates and looked at changes in the mean length at age. This is just a graph showing for the maximum age – this is for each year what the oldest fish was in the sample. This is for Maine up here; this is Massachusetts for these two; Maryland, these two; North Carolina, and these have bluebacks on the left, alewives on the right, and black is males and white is females.

Up in Maine there really wasn't much of a change over time, Massachusetts only had a few points, but it showed that back in the eighties the fish being aged – this is for bluebacks being aged around seven to six, but that has now declined to six and five. For alewives it definitely shows a trend where back in the eighties eight and seven were the older ages, but now we're only getting ages six and five.

For Massachusetts this is pretty much the same ages, so there is probably not any bias related to aging here. Maryland is showing a decline in the maximum age over time for both species and sexes. Then for North Carolina, it bounced around a lot and didn't look much change. Some of the older individuals being aged back in the eighties were as old as nine, but now if you look in the recent stuff the oldest age for both sexes was age six. There have been some changes in the age structure, too, over time.

The surprising thing was when we looked at the age-based Z estimates, there really weren't many trends in the data. This was surprising to us. It looks like there is a trend here like for Massachusetts male bluebacks, but it is really just three points. It is pretty

biased there, but even a bunch of rivers from North Carolina they have data all the way back to the mid-seventies, and it has been pretty much flat.

So, we're getting again another contradictory pattern where now these estimates are saying that there hasn't much of a mortality increase, so we're still trying to figure this one out. Then we looked mean length at age, and those data were available for Maine, Rhode Island, Maryland and North Carolina.

Just to show you one of the good graphs, this is for North Carolina, the Chowan River for blueback females and blueback males.

We applied some statistical tests and we saw that there is generally no decline in mean length was detected in the Androscoggin River data or in the Nonquit River data in Rhode Island, but declines in the mean length was detected in the oldest age classes in the Gilbert-Stuart River, in the Nanticoke River in Maryland. Then pretty much all the ages that we could use from North Carolina all showed a decline in trend of size at age over time, so there have been some changes there, too.

Then finally we had what is known as repeat-spawner data. On a scale you can tell whether a fish has spawned or not and you can use that information to look at the change in the proportion of individuals that are repeat spawners over time, and it is an indication of – it can be an indication if there has been a drop of increased mortality. You can also use the information to come up with mortality estimates, too, which we did.

We had those from several rivers in Maine to South Carolina. Unfortunately, the data was sparse. We had data from 12 rivers, but there were just a few datasets with time series long enough to do any type of analysis. The ones that were available, we did detect only declining trends in the Gilbert-Stuart and Nonquit River. This is a graph just showing for both males and females the percentage of repeat spawners over time.

You can see back in the eighties it was much higher than it is today. This is I believe a combined species, too, so there may be some issues there with changing species composition. Then there were no trends in the remaining rivers. If we looked at the Z estimate from the repeat-spawner data, there were indications of increases in mortality, particularly in the Nanticoke River in Maryland. Again, some rivers just showed no trends. Like in the North Carolina

data it was pretty flat over time, so, again, we get some contradictory information.

These are from South Carolina, the Santee-Cooper River, for females and males, and there are just so few data points these lines showing increases aren't really appropriate because there are only a few points. But if look at, again, the data from Rhode Island showing there has been an increase in mortality at least in the Nonquit and the Gilbert-Stuart Rivers in Rhode Island, there is some evidence there is some increase in mortality. That's it.

I am just going to quickly summarize. Our commercial landings are the lowest in history; they're less than 2.1 million pounds per year. The commercial CPUEs, again, we don't really know if these are all measuring abundance, but we're going to play around with that to see if we can validate those with other information.

Two of the six indices show declines for alewife; two out of two show declines for bluebacks; and two out of three show declines for combined species. The recreational data is just really too imprecise and it is not really useful for any type of management. The run size estimates, seven out of fourteen New England rivers showed declines and some have not shown any recovery. Five out of fourteen declined after 2004 and are showing signs of recovery; and a couple basically was very variable and one may have shown declines.

Then in Chowan River abundance still appears to be low after the drop in abundance in 1985. The young-of-the-year survey indices, some have shown declines. Three out of the seven rivers available for alewives showed declines; one is increasing; three with no trends. Four out of the eight available for bluebacks are showing declines. We did identify some common trends among states which suggest that they're measuring year class strength.

Indices for the large seine gillnets and electrofishing surveys had mixed results, too. The trawl surveys are quite variable and showing different patterns depending on what species you look at. We're definitely seeing mean lengths declining over time for both males and females of both species. Maximum age has declined in three of the four rivers.

We're seeing declines in mean length at age in at least three out of the five rivers we examined. There is data for 12 but they're just so short. Declines in the percentage of repeat spawners were only identified in two out of twelve rivers. We have

conflicting results with the different mortality estimates. That is all I wanted to show you.

In the future we're going to try and update and talk to NMFS to see if there have been any foreign landings with foreign ventures. This year we're going to try and cull a lot of the survey indices so we can get rid of those that we think are not measuring anything. We would like to talk to Gibson up in Canada who does a lot of work with alewives and bluebacks – or probably alewives up there – because he has done a lot work and they have data available from their rivers so maybe we can combine the information to get a complete coast-wide assessment done.

We would like to do some more sensitivity work with the length-based Zs. Some people want to try and look at analyses to examine relationships between herring sizes and maybe striped bass predation, look at and try and develop some more statistical models that we can use the data with. And then just like shad, some people want to come up with some types of regional reference points that we can give to you in the future for management. That's where we are.

CHAIRMAN DIODATI: That was a lot of work, Gary, and that was a very thorough presentation and I appreciate the amount of work that you and your colleagues put into that. I want to thank those states that prioritized staff time to assist you in doing this. Unfortunately, it seems inconclusive on a lot of fronts.

I guess I'm disappointed we don't have management advice at this point from the TC. When do you predict, Gary, that would be forthcoming or is there going to be something that resembles a smoking gun or something that you're going to point this board to that is going to help restore these fisheries?

DR. NELSON: I don't think it will be this year. I have to work on striped bass, but we hopefully will get a lot of the indices culled and that would give us a clearer picture of an overall view of what is going on. The stock assessment isn't due until 2012, so I don't know if we can get it done any sooner, but we could definitely provide more solid evidence of coast-wide trends once we do some of the additional analyses.

I don't know if we will ever be able to point to a particular source that is going on, because you saw some of the trends at least in New England showing different trends in rivers and those could be river-specific problems going on and not regional problems. We will come up with something but right now it is –

CHAIRMAN DIODATI: But there did seem to be a consistent increase in mortality that began at about 1999 in a lot of these systems.

DR. NELSON: Yes, a lot of them dropped around '99, but some didn't drop until after 2004, and then some rivers have been dropping since '85, so it is pretty inconsistent of what may be affecting all of them if there is a common cause.

CHAIRMAN DIODATI: Questions for Gary? Doug.

DISCUSSION OF UPATE ON RIVER HERRING STOCK ASSESSMENT

MR. DOUGLAS GROUT: Gary, thank you very much, that was very comprehensive. One of the questions I had was at your data workshop last summer, along with the data that was provided, was there any metadata that was provided? For example, some of the rivers in New Hampshire which showed some declines in 2005 and 2006 were clearly because of flood events because they wouldn't be able to get up there. The Taylor River is another river in which the problem there is dissolved oxygen levels, and so was that information provided to you at the data workshop for consideration in the stock assessment?

DR. NELSON: Most states provided us with a report, most states. From New Hampshire all we had were your numbers, and some of us had no idea what they meant until we get that report.

MR. GROUT: And they are working on it this week. That was something that slipped under the table, and I apologize for that.

DR. NELSON: But there were a lot in Maine and New Hampshire where definitely the drop in 2005, we all agreed that it was due to the massive floods we were having. My basement was an example of that. That might have been an artificial drop simply due to either counting couldn't be done or the fish couldn't have passed up the rivers.

MR. WILLIAM A. ADLER: That first slide that you had, the colored one, that showed some arrows, there was a light blue cloud out in the water part, and I didn't know what the significance of that was. It was just before you started the –

DR. NELSON: I know which one you're talking about. It was just to show that was the area surveyed by the National Marine Fisheries Service.

MR. ADLER: Okay, that's what I wanted to know.

DR. NELSON: Yes, that's all that was.

MR. PATRICK AUGUSTINE: Very thorough report and very enlightening, but also at the same time very disturbing because it is like we're going to put together an addendum to create a wish list to get some of the information that you aren't able to supply to us to help us make a decisions. At least that is my perception.

I think we're moving along in that direction but it just seems to me that there is so much ambiguity here as to where we really are that we are going to overlay – and I am talking to the amendment as a result of what your presentation was – we're going to create a document that is going to create more work for the states to put into monitoring and so on based on where we are now where even the technical committee doesn't have enough access to serve as a benchmark, if you will.

I wonder where we're going with this and I think we will address that as we go through the addendum, Paul, but again it just raises more questions as to what can we expect the states to produce in view of what they have been able to produce so far with the limited assets, if you will, staff and so on, to move forward with this.

It always seems like we're moving in a direction where one size fits all. In fact, when you talk to each of the states each one has a different perspective. We're now talking about managing riverine systems in some specific states. Those are my concerns and, again, I don't know how we move any faster with the information we have.

With the basis of that information you have presented, it is extremely difficult to support moving forward with this addendum based on what we're going ask our states to do. I would love to hear some of the other board members' positions on this. And, again, no reflection on what you folks have done; I think you have done a fabulous job with what information you have and presented it extremely well, but it does show how big this hole is of data lack that we have.

It is kind of scary when you stop and think with diminishing resources how we're ready to go forward with another amendment or addendum to tie up what limited resources we have. The question would come as to whether it is appropriate at this point in time or would more information be available through the

technical committee and better vetting of this document, say, for the May meeting. From you said, Gary, it doesn't sound like you're going to have much more information until possibly the end of the year, at best.

I don't know if you can respond to all my gibberish, but the message is we're concerned we're moving forward with a process with very limited information, allocating more resources, the limited resources that we have to do something with the wish list that sounds like a nice piece paper that might sit on somebody's desk. That is my straightforward response to where we're going with this so if you could try to address some of that, I would appreciate it.

DR. NELSON: I don't know if I can because I just started river herring six months ago so I am just getting involved in the whole process, and I have no idea what the amendment is about.

CHAIRMAN DIODATI: Yes, I think it is unfair for Gary to deal from a technical perspective with answering that, but we're going to address a lot of your concerns, Pat – those are very good discussion points – a little bit later during this meeting. Jaime.

DR. JAIME GEIGER: A few questions, Gary. First of all, again, great report, and again it sounds like you had a great bunch of folks helping you out with the various data collection analysis and again an outstanding job. Has the technical committee looked at – in anticipation of the stock assessment in 2012, I believe, has the technical committee had some hard discussions about the kinds and types of data that is essential to allow the stock assessment to be productive and effective?

MR. ROBERT SAZINSKI: As the TC Chair, we have not had that conversation, per se.

DR. GEIGER: And the answer is, sir?

MR. SAZINSKI: We're in the middle of it now and we hope to get together. Unfortunately, we have not met as the TC and we need to do so. I guess it is just to emphasize that point.

DR. GEIGER: Has there been any comprehensive genetic analysis been done on any of these river-specific stocks or populations?

MR. SAZINSKI: We don't know.

DR. GEIGER: And, finally, another question again, and this is, again, a comment to the board. All of us are certainly struggling with limited resources and allocation of those resources to the highest priority need. I also know that fish passage and fish passage issues and habitat restoration remains a very high priority for I think virtually everyone around this board.

Certainly, the issues with river herring and American shad related to fish passage, FERC relicensing, habitat restoration and everything continues to be an extremely, extremely high priority with all of us. I would hope that as we further discuss this that we take these factors into consideration as we look at allocation or addition to the various resources necessary to get a good, robust stock assessment. Thank you, Mr. Chairman.

MR. DAVID SIMPSON: It was a very good presentation and the document was extremely helpful as well, all eleven hundred and some pages of it. What struck me both in reading it and in your summary of it was the variability from river system to river system. Some to be doing pretty well; others are having trouble. Certainly, we identified several years ago that we have an issue in the Connecticut River and that is why we acted to close the fishery in 2002 to both alewife and blueback harvest.

We looked at our particular case and applied management to that system that was appropriate for that system, and I think the challenge for the commission here and technical committee is going to be to look at the common themes that there might be, looking ahead to management, the kinds of things the commission can do.

We can coordinate, as Jaime suggested, a focus on things like upstream passage and sharing knowledge on those things and downstream passage because we're learning that is just as important, maybe even more important because you may be doing them a disservice if you help them to get up but you don't provide access down.

I think that is going to be our challenge is are there common themes for the commission to work on on river herring or are we better off focusing as states and perhaps with some neighbors, depending on the river system, on the local status of the stock and appropriate management action decided at the local level?

CHAIRMAN DIODATI: More questions for Gary from the board? Anymore comments from the

board? We will allow a question or two from the audience for Dr. Nelson. Jaime.

DR. GEIGER: One more comment, Mr. Chairman. Certainly, I think our developing the Atlantic Coastal Fish Habitat Partnership that you all have endorsed and supported I think is going to have a significant role to play with this species and others related to the various habitat restoration activities. I would also ask us not lose sight of that developing fish habitat partnership and continue to let that move forward very smartly, because that is going to be a significant factor to assist us with this species and others. Thank you, Mr. Chairman.

CHAIRMAN DIODATI: Thank you, Jaime. Any other questions or comments from the board? Any questions for Dr. Nelson from members of the audience? Patrick.

MR. PATRICK PAQUETTE: Patrick Paquette, Striped Bass Association. Gary, could you tell us – a lot of the recreational communities have a moratorium going on that has begun since 1999 and 200 – can you tell us if you're seeing the benefits of that moratorium in the numbers because I couldn't tell like the upticks, and I would like to hear from you instead of our opinion.

DR. NELSON: I'll speak for Massachusetts. There is some sign. Particularly in 2008 there was a slight jump up in some of the river estimates of herring, so there seems to be some recovery going on, but it has just been slow as heck.

MR. PAQUETTE: So the number matched? In other words, it was a conservation measure that was supposed to – if we gave up taking 20 percent out – I believe that was the Massachusetts recreational harvest was 20 percent so you have seen 20 percent still in the rivers? It is not sort of getting lost in whatever the mystery reason for the decline is?

DR. NELSON: Well, the estimates since 2005 have been pretty much been flat. They haven't gone extinct, luckily, so at least we have stopped the decline. In the last couple of years there has been a slight uptick in at least the Monument River. That is really all I know about it.

MR. PIERCE: Jeff Pierce with the Alewife Harvesters of Maine. I would like to ask in some of these landing charts you show a reduction or decrease in harvest; is there any correlation with the decrease in effort or weather pattern such as in 2005 where we

had the severe flood where nobody could fish but the fish still passed?

DR. NELSON: We don't have any effort information available whatsoever. It is just NMFS harvest and that's all they collect.

MS. LARA SLIFKA: Mr. Chairman, Lara Slifka, Cape Cod Commercial Hook Fishermen's Association. Gary, it looked as though the mean length and maximum age of both the blueback herring and alewives had declined. Do you have a reason for that? It seemed like it was pretty much a trend. Does that show basically an increase and overall drop in mortality of the fish?

DR. NELSON: We couldn't really determine if there has been a drop or an increase in mortality. You saw all the different techniques we used and they're contradictory. It is concerning that the average size is declining and there is something going on that is causing that. It could be growth issues, it could be predation issues, it could be some other type of selective factor. We really don't know and we didn't really discuss it in the last few months with the report.

MS. SLIFKA: Now when you mentioned just growth issues, is there a change in food at all that is out there that would decrease the growth?

DR. NELSON: I personally don't know that. That is just something we would have to look at, whether there are publications. There have been some changes in the northeast, if I remember correctly, in some of the copepod composition.

MR. SADZINSKI: There is also some evidence that zebra mussels may be impacting the phytoplankton and zooplankton, actually decreasing the levels of that, basically food for young of the year decreasing young-of-the-year indices.

MS. SLIFKA: Did you say zebra mussels in the Hudson?

MR. SADZINSKI: Correct.

CHAIRMAN DIODATI: Anymore questions from the audience? Gary, I noticed you didn't show anything relative to predation. For instance, did you attempt to do any correlations with the increase of striped bass?

DR. NELSON: I did it for Massachusetts, but that wasn't one of the topics we wanted to – we didn't have time to really do a complete analysis.

MR. ADLER: Now that you have brought the word up, predation, I am sure there are so many species that are predators of this particular species, and they probably range along the whole coast. I do agree with Jaime's idea that the habitat restoration of the upstream is a very critical part of this because it also seems to me that I believe the eels, which are also declining, use the same rivers to do their thing as the river herring do.

Isn't it strange that along the whole coast those seem to be declining or they seem to be in decline all the way along the whole coast and which also happens to be that many of the predator species have been increasing and the river passage ways are problematic, so there are a whole bunch of things here playing and not one area is susceptible to this, it seems to be the whole coast, and the same species using the same rivers seem to be in trouble. I think there is a lot on the predator and the habitat issues which are almost more smoking guns in my book than some of the other things. Thank you.

CHAIRMAN DIODATI: Any final questions or comments for Gary before we release him?

MR. BROOKS MOUNTCASTLE: Brooks Mountcastle, Marine Fish Conservation Network. Gary, didn't your study also show that habitat degradation was not a significant reason for herring decline in most of the states?

DR. NELSON: I personally didn't deal with anything like that in this assessment. We just put in some paragraphs on possible habitat degradation issues, but we don't know if there are any current major issues with it right now. I don't personally know that yet. I would say, no, that wasn't in any of the things we discussed at this point. That's all I can say, really.

MR. KELLY PLACE: Kelly Place, Virginia. I was asked by several of the commercial groups in Virginia to bring to your attention something I know you have already looked at but probably not sufficiently according to the watermen. We have a terrible non-native species problem, invasive species, the blue catfish and the channel catfish.

They're highly piscivorous cats, and I guess the direct empirical observation of thousands of watermen feel that they are the prime reason for the

decline of all the anadromids or the diadromids, for that matter, in the James and the other major tributaries and the bay. We would encourage you to look much more closely at what mortality can be associated with those non-native fish. Thank you.

DR. GEIGER: As this discussion has gone on, I am struck by the similarity to the declines of this species to the early declines of striped bass. I am also very aware that we have put forward several hypotheses under the Emergency Striped Bass Act to look at the causes of declines in some symptomatic logical fashion.

My sense is some of those hypotheses that were put forward in the Emergency Striped Bass Act that are still valid today may very well be very applicable to examining for looking at declines of alewives and river herring as well as American shad. I would certainly ask us to not lose sight of some of the previous work we have done on other species and how applicable they are to maybe input and impact on these species as well. Thank you, Mr. Chairman.

CHAIRMAN DIODATI: And that is all well documented. Lance.

DR. LANCE STEWART: One thing that strikes me is when we talk about habitat we're often focused on the physical barriers and sedimentation, but one of the underlying burning questions I have is these are all olfactory orienting fish. They're basically planktivores, and they probably have much more sensory Q demands. A lot of the river systems have quite honestly been, I think, loaded significantly over the last ten years in discharge.

I am looking at the chemistry, the physiology of fish migration drive as one of the major factors in habitat, and it will be a simple thing to do for water sources is to get some sort of a ratio of volume of river flow at the time of these migrations and the amount of effluent discharge that has occurred over the last ten years in increase. So, just an added aspect of habitat that I think we should be really focusing on.

CHAIRMAN DIODATI: Going back to what Jaime pointed out, the striped bass research era created a long list of research priorities, and there was significant funding available for independent organizations to go ahead and answer questions like the one that Lance just brought up. I think it would be difficult for the states working independently through an assessment process to answer that question, but I think it is important for us to generate a list of possible research areas that we can prioritize

with the funding sources that we're aware of. That may be something that the technical committee has already done or could be thinking about.

MR. WILLIAM GOLDSBOROUGH: Just a comment, Mr. Chairman. The issues of habitat degradation and predation have been raised in this discussion sort of as two similar forces that are causing problems for river herring. I agree they both are very important, but I think we have to be careful to make distinctions between them.

Certainly, habitat degradation is a negative that humans have caused on the landscape, as it were, but predation, with the exception of the invasive species that Kelly mentioned, is a natural phenomenon, and in fact we ought to be thinking about it the other way around in terms of the important forage role that river herring and other alosids play for other species like striped bass that have a lot of value to us in their own right. I wouldn't want to castigate predation as a problem for river herring, per se, with the exception of that invasive species issue that Kelly mentioned. Thank you.

CHAIRMAN DIODATI: We're evolving into actually what is an agenda item that is coming up soon, which is the discussion of the stock status report, so why don't we have Gary stand down and Bob step up to provide the TC's comments. Then I think the board can have a general discussion about all this.

MR. SADZINSKI: The technical committee met via conference call on 22 December, and we were also joined by some members of the PDT and the Stock Assessment Subcommittee. Copies of the report were distributed previously, and Gary Nelson summarized the river herring report to us. The TC also acknowledges the tremendous task that the Stock Assessment Subcommittee was charge. They have done a remarkable job in a very short amount of time.

The TC did have several suggestions including the inclusion of recreational data, some Canadian data and additional ocean datasets. The most significant addition to the report included – that's in the executive summary – to include the current status in management options and also adding a section on the purpose of the report and its limitations. It should be noted that Stock Assessment Subcommittee has incorporated these changes into the report. In closing, the TC agrees with data usage and the conclusions of the report. Thank you, Mr. Chairman.

CHAIRMAN DIODATI: Okay, questions for Bob? Okay, I think we allow – we certainly have the time to discuss in general everything that has been presented if anyone would like to add on to or remark to some of the comments that have already made. Certainly, I think it would be valuable for the TC to add an appendix of research priority items.

I think that the commission will have to do its best to help identify funding sources to get some of that done. We should look beyond the resources within our states and perhaps look at academic institutions and other research organizations that can assist in providing information that we need to understand this more fully. Does anyone want to begin this discussion about the status report? I know, Pat Augustine, that you had made some good points relative to your concern. Do you want to discuss those concerns a bit more at this point?

MR. AUGUSTINE: Mr. Chairman, we have been in close contact with our Andy Kahnle and Kathy Hattala, our folks who are involved with the process. They have reviewed the document as presented, and the items that they brought forth of major concern was we're asking the states to do some interesting things that quite frankly they're not sure they're going to be of much value.

We're looking at something that is going to going to require some comparison to a benchmark. We haven't established a benchmark. And bycatch monitoring requirements; Amendment 2, for instance, requires all states to monitor bycatch in rivers, estuaries, states' ocean and so on. All agree it is an important thing, but no one can individually afford to attain it. We don't have the money.

This problem is not unique to the Herring Amendment. Other amendments are exactly the same. More and more species management plans are requiring it. The resolution might be in Amendment 3 where the responsibility is shifted to monitor ocean bycatch from the states to the ASMFC working in cooperation with the states and the feds as a consideration how to address it. It doesn't show that in Amendment 2.

Under management choices, Amendment 2 provides a suite of management responses, and the specific items they list are 2A, B, C, D, 3A, B, C. That is a lot. They go into ridiculous details. I don't like to use that word on the record, but they used it. And they followed on by saying no one at the board level has the wisdom to select such specific measures that would work in all states.

To Dave Simpson's point, each state has unique and different problems to deal with. The solution might be the board should choose general categories, such as reduce directed harvest, reduce bycatch or all of the above and then let the states recommend how best to accomplish the goal. They know the fisheries and what changes would work.

We have taken this approach with Amendment 3. The board provides broad objectives and the state recommends strategies. Those are the kinds of things that they listed, and they went on into monitoring requirements. They gave the problem; they talked about the solution. Benchmark problem; there are none.

One juvenile trigger is so liberal that the stocks would have to be in serious decline before it was detected. Juvenile monitoring should be an early warning and not an obituary. So, their recommendation is this amendment with all the work that has been done on it, and, Kate, you picked up a monster and carried it well. You have presented well what we had to work with, but their indication is that overall some of the elements in here are good.

They need to be looked at, but by and large this document isn't ready for prime time. The comments that we have received so far, and I am sure that other states are going to have similar comments, would be we're not ready for prime time, but let's go back – not to the drawing board, but let's go back and take a good, hard look at what it is we're trying to accomplish.

Then he talks about the Shad PDT initiating an Amendment 3 and so on. So, I won't go into all the details, we will make them available to everyone if you have any specific questions. We rely very heavily on Andy Kahnle and Kathy. They have been involved with herring and shad forever. It is their baby.

If these two stocks completely disappear or they don't manage them well, the Hudson River is totally out of business. So they're concerned on that basis and on a much larger basis. So, Mr. Chairman, if you don't mind I will stop there unless someone has specific questions or want to expand upon our concerns. Thank you.

CHAIRMAN DIODATI: I'll ask do other board members share New York's concern or I should say Pat's concern? I see Connecticut nodding their head yes. Doug.

MR. GROUT: Mr. Chairman, I agree and at the last board meeting I stated such. My concern with this amendment is that in the state of New Hampshire we have a mixture of stock status there. We have stocks that are in very good shape and we have some that are in poor shape. In the places that we have had poor shape, we have already taken measures on our own to limit fishing activity in those areas where we had data that clearly showed that fishing was having an impact.

In one river, the Taylor River, where we didn't have, we added a complete closure just for precautionary because we knew that the problem going on there was dissolved oxygen and the run levels were so low that we couldn't afford to have any fishing on there. We already, in our state, have spent tremendous amounts of money on river herring habitat improvement and monitoring.

Our department has constructed seven fish ladders in our tiny 18 miles of coastline. We have also worked with FERC to have an eighth fish ladder installed at the head of tide between our border waters with Maine. We have removed one head-of-tide dam. We are in the process of removing a second head-of-tide dam.

We monitor all these fish ladders extensively even though we haven't provided the full report to Gary, unfortunately. With age data, return data, we have a juvenile young-of-the-year survey. We are working very hard because we feel that the river herring resource in our state is very important. It is very important as a forage base for both marine and freshwater species here.

The concern I have always had with this is having the cooperative state work here decide what kind of management measures we need for this resource when it is a resource that is fished within state waters. The only directed fisheries are within state waters. I do understand the concern about bycatch in other fisheries, and that is something that we're addressing at the New England Fisheries Management Council.

We're looking very closely at potentially implementing some area closures if we find that is necessary. Because if there is a significant bycatch in a non-directed fishery out in the EEZ, we do need to address it, but we also need to make sure that indeed the best science shows that it is a significant bycatch that is affecting the river herring stocks.

We have had a Shad and River Herring Plan by the commission since 1985, I think was when the first one came in, and it was primarily directed at habitat and fish passage issues at that particular point in time. That was very important for us. As we go through looking at what we need to bring forward in this addendum, I think we have to look very closely at the basic fisheries' management philosophy we have here at the commission, and that is trying to work on managing stocks of fish where fishing by one state and management by one state can affect the fishery and the resource in another state. Thank you.

MR. TERRY STOCKWELL: I share Pat's and Dave's and Doug's sentiments. We have got notably limited data and even less funds, but we're moving ahead with river herring, which I believe are in trouble. I'm hugely concerned about universal requirements. I am very concerned about a universal definition of sustainability.

The state of Maine, as most folks know, we have 16 rivers right now that have worked out a shared management plan with the state and the towns that we believe are sustainable. It fuels a large part of our coastal economy. Doug mentioned ocean intercept issues. We're working on that with a herring amendment right now. Both councils are working on bycatch issues.

Much like our discussion about winter flounder yesterday, I want to tiptoe forward here, but do so in a way that doesn't put one state or one jurisdiction against one another and allow us each to manage our own or with some sort of common goals.

DR. EUGENE KRAY: I just wanted to echo a little bit the whole issue of federal/state cooperation that is required to address the issue of bycatch particularly in the Atlantic Herring Fishery and other fisheries. I think also from a perspective of an ecosystem approach, taking a look a real hard look at predation as striped bass are doing well, as other species are doing well, what impact is that having on the river herring and the shad. I think those are issues that need further research and things that we ought to look at in the process of this amendment.

CHAIRMAN DIODATI: It seems that the timing of the approval for this draft amendment is not consistent with where the stock assessment is. I think the lack of management advice from our technical community is probably causing some apprehension. It is probably unfair of me to ask given that there are a lot of measures that are currently in place across the coast that are preventing direct harvest of river

herring, that some of these measures are relatively new in the past four of five years, such as moratoriums; does the technical committee have an opinion on what the risk is to the resource if we don't move forward with this amendment today?

In other words, if the current measures remain place while you complete the assessment, is that going to jeopardize the resource, put us more at risk, or do you feel that we're somewhat stable at this point? I know that is a tough question.

MR. SADZINSKI: That's a very difficult question to answer, especially with the limited resources that we put forward for river herring, but that is certainly a question we can investigate but is going to take several months to come up with an answer.

CHAIRMAN DIODATI: I would be also interested in getting some thoughts here about are there any options listed that members of the board would feel comfortable moving forward today? There are many options that are listed here in this draft. Some of them I gather are going to be problematic given the questions that are still outstanding, but there probably are some that we could adopt. Meanwhile I think we need to also consider the possibility of a delay, but I only want to entertain that if it was productive and constructive. Does someone have their hand up over here? Pat.

MR. AUGUSTINE: Mr. Chairman, it just seems that some of these are so interrelated that to approve only a part of it we would add more to that and it may disrupt another part of it that will have to be worked on. I would just think that if we're comfortable with what the items are in the document as it is that need to be clarified more, either some added or some changed, as in the Andy Kahnle and Kathy Hattala assessment or comments like Dave Simpson and others around the table have made, that might be the best way to go as opposed to trying to hobble up something off the top that may give our technical committee or PDT something to work on.

I would think we should just take the whole document and move it back to the PDT and have them present a clear, more finite document in May, knowing that our people didn't say there was going to any adverse effects by doing that as far as they knew. It may affect some other state differently, so it might be interesting to ask the board members if it would affect any of their states adversely if we didn't do something.

MR. ADLER: Mr. Chairman, I agree with Pat. I did have a couple of things. It seems like I don't know how we could get more of a handle on the bycatch issue out in the ocean; also, if there was any way to find out or get where these fish happen to come out and get into the ocean because some of the things that were in the amendment, ideas that were in the amendment was keep the fishermen away from large areas of river herring at certain times, but before we make any decisions or before we would make any decisions in an amendment as to that, it would be nice to know what we're playing with there with regard area restrictions because we're trying to cut down on the river herring cake out there; and also on the bycatch thing just to find out some questions.

I know a hundred percent we can't afford it. This sounds nice but we can't afford it, but if there was some information that we could get which would help us make a better decision when it does come down to making an amendment decision. The other question I had was you mentioned there were only 2 million pounds harvested and you probably thought that was an underestimation.

Okay, because that does seem like a very low number given all the states and the takes, 2 million does seem to be very low, but, anyway, I didn't know if there was any way to get a better figure on that, too. I still have a lot of questions, but I just wanted to know if there was some way we could get started on some of this information without putting a cement mixer amendment into place.

MR. THOMAS McCLOY: Mr. Chairman, I don't really have an issue with sending the document back for reworking, but I think we need to give the PDT a little bit of direction on what elements we're going to be dealing with. As an example, all the monitoring requirements that have been suggested in this document at the moment are mandatory.

I am sure you have all heard me get up on this soapbox before, but with decreasing personnel and fiscal resources, quite frankly, New Jersey has no ability to address any of these things whether they're mandatory or voluntary. We do get some river herring information in some of the other sampling programs we have, but, quite frankly, this does not rise above the bar in importance with the species we deal with.

I don't mean to minimize the importance of it because it is important to us, but when it comes down to where the rubber hits the road we have to make some difficult choices on what we can allocate our

resources to. I don't know what other situation the other states are in, but from our perspective to send this document back and then have it come back two months, four months, six months from now with mandatory monitoring requirements at the level that are in here now is just not going to be feasible for us to deal with.

The other issue I just want to touch on briefly is the bycatch issue. As most of us sitting around the table are aware, the bycatch issue has to be dealt with in other plans whether it is Atlantic herring or Atlantic mackerel, and we have limited ability at this board level, at least, realizing that some of us sit on those other boards, to effect changes in those plans.

What do you do when it is solely a Mid-Atlantic Council Plan? Yes, we do have members that sit on both, but I guess from a practical standpoint how do we really implement anything that is going to make a difference as opposed to just some feel-good measure? Thank you.

MR. TOM FOTE: I guess I'm sitting here and I'm looking across the river and I'm watching this huge stimulus package go through. We're going to do bridges, we're going to do roads, we're going to do a whole bunch of infrastructure, and the unions are very supportive. The problem is the scientists don't have unions.

None of this infrastructure is going to go into fisheries management or basically protecting the commercial or the recreational fisheries of the United States. That is a disappointment. I mean, we basically have taken the brunt in the last couple of years as much as anybody else with car gas prices and everything else that affects this industry, and yet when they're helping everybody else out they're not helping us out.

Having said that, it was an interesting presentation. I haven't sat through river herring and shad in a long time to watch a presentation. There was a lot of information given out. It was kind of an overload for me to get all that information at one time and it is hard to decipher. I am having a difficult time trying to figure out what. I know that the river systems are in trouble. I know that we have more than just fish ladder problems and things like that.

We have endocrine disrupters that are affecting the sex lives of all the bays and estuaries and rivers that we have sewer discharges. None of those are going to be addressed. When we look at the fish that

basically inhabit those areas, it is eels, it is river herring, it is summer flounder and winter flounder.

All those species spend a lot of time in bays and estuarine-dependent environments that are basically seriously having serious problems. I mean, look at the weakfish population. We did everything right in my estimation for the last 15 years on weakfish. We basically reduced the catch commercially 90 percent.

We basically went from a fishery that was fishing on six- and seven-inch fish to fish that are fishing on sexually mature species. We should be seeing that stock jump up and it went in just the opposite direction. Now, what we can do sitting around managing fishermen, but until we manage the environmental conditions that are causing the problems and until we basically directly affect that and until we make that an issue that seems to get lost in all this stuff that we – because we sit around this table and going back to 1991 when I first sat here, we made every plan that we basically made compliance issues on the agencies that we can direct, and that is the fisheries agencies.

When it came to water quality and all those, we basically took a punt. We never made them compliance requirements because state agencies can't direct one other state agency and the governors get involved and everything else. But unless we start doing something to that effect, the federal government and hopefully maybe this new administration we will start seeing some of that; that we basically start looking at the bays and the health of those systems; we're not going to bring a lot of these species back no matter how many fisheries management measures we put place. I'm sorry for my long speech but I just felt it was necessary.

MR. A.C. CARPENTER: First I would like to ask a question of the technical committee and then I have got a comment that I would like to follow up with. In our situation in the Potomac this fishery is 99.9 percent a bycatch of the pound net fishery. If we were to declare a moratorium and say no more river herring allowed, would it affect the mortality rate that the bycatch is currently imposing from the pound net fishery?

MR. SADZINSKI: That is a good question, A.C. As we discussed when you catch a herring in a pound net or even in a fyke net, it hits the deck and it is pretty much dead. As far as total mortality it would not affect it.

MR. CARPENTER: If I can follow up, Mr. Chairman, I am in a difficult position because I know

that something has to be done. Our stock has collapsed and that is pretty evident. We have a declining pound net fishery as it is, but our only option would be a moratorium which would absolutely make no difference to the total mortality of this species.

I have to echo the first Tom's comments about the mandatory monitoring. We don't have the resources to do it; and, quite honestly, if all of these mandatory compliance issues come back PRFC is going to be found out of compliance because we can't monitor it. The ACFCMA money that we get doesn't go as far as it did when we first got it.

We haven't gotten an increase since the very first year, and every other program that we are funding with that money is costing more and more every year and we're getting less and less information. If this thing comes back with all these mandatory programs, we're going to be found out of compliance and have the inability to do anything to try to correct or improve the stock.

CHAIRMAN DIODATI: I have Jim, Bill and Jaime and Dave, but what I'm leaning to – we're scheduled to break for lunch relatively soon, and we should do that and come back and have Kate present a summary of the public comments, and I think we will hear from the advisory panel as well before we make any final decisions about this.

What I'm leaning towards is perhaps I think it might be valuable for a subgroup of board members to work with the PDT on some of the options that have been vetted publicly in this plan and see if we can come back at a future date with a more concise list of options that have the definitions that are necessary and that have the practical monitoring measures that we can employ. That is what we ought to be thinking about as we continue this discussion and we break for lunch.

MR. JAMES GILMORE: Mr. Chairman, A.C. made most of the comments I was going to make about what Tom had brought up is that New York, again, would be also out of compliance as most of the states would be if the amendment went forward. But to add to that, even what we're looking at today or in the next few weeks, whatever, is changing dramatically.

The example – I mentioned it to Paul as I came in here – was the ocean bycatch as Bill had brought up is something that we all need to look at. We essentially were planning on getting money from a certain fund to do that. Yesterday our governor and

legislature cut \$25 million from that budget. If I had made this comment on Monday, I would have said we have got some money coming down the pipe, and now it looks like we're not even going to have that, so it is getting worse instead of better, so we all have to keep that in mind.

MR. GOLDSBOROUGH: Just putting aside the habitat stuff for a moment, I think my background speaks to how important I think that is, but simply from a fishery management standing, which, of course, is what we do most directly here, I think bycatch is the biggest issue we have to come to grips with, and I want to give a little bit of context for that.

It has been noted that we have some runs that are relatively healthy, emphasis on the word "relative", and others that are as bad as collapsed, and yet in the ocean they tend to mix. It was about ten years ago, I'll say, when we had a peer-reviewed assessment for American shad, and we had a similar circumstance and the recommendations from that were that we needed to adopt river-specific management.

It was based on that that we phased out the directed ocean fishery for American shad, recognizing that that fishery on a mixed stock was inherently unmanageable because of the different status of the different mixed stocks. We have that same circumstance here. I don't believe we have a directed fishery on river herring in the ocean. If we do, we should stop that, certainly.

I think bycatch that we have every indication is a major problem in the ocean essentially is in the same category. It is harvest on a mixed stock which could, theoretically speaking, in any haul of net remove the remnants of any given collapsed run. I would note that by the nature of the stock status review and assessment that we're doing right now that was reported on earlier, looking at specific runs we have essentially adopted a river-specific management philosophy. I would like to hear if someone feels otherwise, but I think that is the right basis for going forward.

And given that, I again think that we need to put every emphasis we can on ocean bycatch. I don't know if states' waters are a major venue for that. It seems like it is mostly in the EEZ, but I would note that the New England Council has taken action recently to start to address this problem.

There is a little bit of data on some hot spots that might be considered for action that we ought to pay more attention to and I think we ought to use as a

model for developing more information on how to deal with ocean bycatch. It seems like ocean observers are a key part of that. I guess what I'm saying is this commission, which, of course, represents the whole coast, probably ought to send a message to the other two councils, if they're not already on this track, and ask that we have a concerted effort to deal with this problem coastwide.

It does, of course, start with gathering more information as noted and resources are very limited, also as noted. I don't have an answer for that one, but I think we need to put a priority on identifying an answer for that one as we move forward. Thank you, Mr. Chairman.

DR. GEIGER: Mr. Chairman, I think Bill Goldsborough made most of my points. I would just reemphasize I think the shad model is a model that we need to emulate. I think what happened in the shad model can be applied to the river herring and serve us well. I am concerned and I would like the technical committee to really look hard at what critical data needs we have based upon this report and basically cherry pick what are the minimum essential data points and areas we need to ensure success for the upcoming stock assessment in 2012.

Certainly, the shad assessment served us well and continues to serve us well and serves as a good foundation. I agree with Bill on bycatch. I think that is something we need to address and address it quickly, but I also would say that – and in response to Tom Fote's thing, I think the stimulus bill, whenever and however it comes out, it is going to have a lot of infrastructure requirements, and I will bet that there is going to be significant indirect and direct impact on fish passage coming out of that stimulus package.

I know a lot of us are highly geared to that, to take advantage of that. I see a real opportunity to make some significant gains in fish passage along the coast. Certainly, I know the Fish and Wildlife Service and I know the National Marine Fisheries Service is going to be well positioned to try to help all of us collectively to address that and take that into consideration. Thank you, Mr. Chairman.

MR. G. RITCHIE WHITE: Mr. Chairman, in thinking about your idea of the subgroup, I think that is a good idea. Looking at the agenda, it looks like we're going to have a substantial amount of time this afternoon, and my suggestion would be that we kind of start going through the addendum to maybe weed out some things and give some direction to the

subgroup, that we take advantage of that as the full board and start the process.

CHAIRMAN DIODATI: Yes, I thought maybe we would hear from Kate first on her presentation and then the advisory panel comments, and then we could maybe take up the discussion again and create a work list. During the lunch break we ought to be thinking about that upcoming discussion, and we also should be thinking about who might want to volunteer to participate on that working group. This suggests that we will perhaps be coming back in May with some recommendations. I don't see any other hands up this point, so why don't we break for lunch. Thank you.

(Whereupon, a recess was taken at 11:55 o'clock and the meeting was reconvened at 1:00 o'clock p.m.)

CHAIRMAN DIODATI: Okay, we are ready to begin. We're going to pick this back up with a review of public comments and an advisory panel report or comments, and then we will go back to discussions. I am going to turn to Kate Taylor.

MS. KATE TAYLOR: For any commissioners that don't currently have a copy of Amendment 2 and would like a copy in their hands, if you could please raise your hands and staff will provide you with a copy if you don't currently have one. I am first going to start with just a brief overview on the Amendment 2 document.

DRAFT AMENDMENT 2 FOR RIVER HERRING

In March of 2008 the Draft Amendment 2 was developed for public comment, and in August the board reviewed the draft and made changes. The draft was sent out for public comment in October. The comment period closed on January 1st, and today we are discussing consideration for final approval of Amendment 2, which concerns river herring management.

Previous stock assessments for river herring have shown declines. However, current data on river herring stocks makes the status hard to assess, as we heard prior to the break. There are currently moratoriums in Massachusetts, Rhode Island, Connecticut, North Carolina and Virginia. In Virginia it is in rivers flowing into North Carolina only.

The public has raised questions as to whether Amendment 1 is adequate for river herring

management. In the Amendment 2 documents the objectives; there are four of them. The first is to prevent further declines in river herring abundance. The second is to improve our understanding of bycatch mortality by collecting and analyzing data.

The third is to increase our understanding of river herring fisheries, stock abundance and population health, and the fourth is to promote improvements in degraded or historic habitat throughout the species range. Amendment 2, it is important to point out that this document deals only with the Atlantic coast migratory stocks of alewife and blueback herring. Landlocked populations are not included in this management, and Amendment 2 retains all requirements for American and hickory shad as they are currently.

There are four main sections to the amendment document. The first deals with habitat conservation and restoration. The measures contained in this section will remain as is if the board decides to approve this document, unless there are any changes that the board would like to make. The next section is a monitoring section, and there is a commercial and a recreational fisheries management section.

Just to briefly go over the habitat conservation and restoration section, for this section it is important to note that the board can choose the status quo on these options or the listed options in this section. The board may choose to implement sections of these monitoring programs as mandatory, but they also have the option to include other sections as recommendations to the states.

Just to briefly go over this section, one of the first areas that it covers is that each state should prioritize, identify and categorize all important habitat, periodic monitoring should be done to protect the long-term health and viability of this habitat, and states should develop plans to improve the quality and restore adequate access to the habitat.

The document also makes other recommendations concerning dams and other obstructions, water quality, habitat protection and restoration, permitting issues as they might impact essential fish habitat, issues of stock restoration and habitat change. The monitoring programs that are contained in this document, there are three main sections. The first deals with the fisheries-dependent monitoring, which would be required in three systems.

The second deals with the fisheries-independent monitoring which should be required in one system.

The document also has a section that deals with bycatch reporting. On the commercial fisheries management measures contained in the document, there is an option for the board to choose status quo, which would be to retain the current management. There are options for reducing effort, to regulate bycatch.

There is an option for closing fisheries with exceptions for system that have a sustainable fishery. There is an option for a coast-wide moratorium. The board may choose to implement any of these options singularly in combination with other options. On the recreational fisheries management side, there is an option for status quo, options for recreational permits, to reduce effort, and again to close fisheries with exceptions for systems with a sustainable system or coast-wide moratorium.

Again, the board can choose to implement these options singularly or in combination with other options. States would also be allowed to submit alternative management programs as long as they demonstrate that their proposed management will not contribute to overfishing or inhibit restoration. States would be able to apply for de minimis which would be determined once the specific management program is adopted.

PUBLIC COMMENT REVIEW

Now I am going to go through the public comments that were received during the public comment period for Amendment 2. A total of 14 public hearings were held in 11 states. In total 111 people attended these public hearings. There was no public attendance at three hearings. The two hearings in Maine accounted for 32 percent of all public attendance, and hearings in Connecticut, Rhode Island and Virginia accounted for 35 percent of all attendance.

The written comment period went from September 29th to January 1, 2009, and a total of 3,924 written comments were received by FAX, mail, phone and e-mail. There were 44 unique written comments that were received during the public comment period. Twenty-one were from groups and organizations and 23 were from individuals. There were 3,851 form letters that were drafted by the Marine Fish Conservation Network and received by mail and e-mail.

There was a signed petition drafted by the Cape Cod Commercial Hook Fishermen's Association, as well as 19 submitted and signed form letters drafted by that organization. There were ten additional signed

form letters that were received, and that was drafted by an unknown organization or person. Written and public hearing comments that were received supported the habitat conservation measures contained in the document.

Specific comments received focused on improving fish passage as well as working with sister organization and increasing public outreach and education to accomplish the habitat goals. With regard to the monitoring requirements contained in Amendment 2, written and public comment supported increased monitoring and reporting of harvest, bycatch and discards of river herring in all fisheries, as well as the fisheries-dependent and independent monitoring requirements. Comments were made recognizing the tight financial situation that states are currently in.

Moving on to the commercial fisheries management measures, the majority of comments supporting the status quo were received at the Virginia public hearing. The majority of comments supporting Option 2, which is reducing effort, were received at the Maine public hearings where current management already requires an escapement provision in all rivers.

With regard to Option 3 regulating bycatch, half of all unique comments received supported at least one or multiple methods to regulate bycatch. Bycatch was brought up at most public hearings, and bycatch was also the focus of all form letters that were received. More comments were received supporting Option 4, which is close fisheries with exceptions for systems with a sustainable fishery, than for Option 5, which was a coast-wide moratorium.

There were fewer comments received on the recreational fisheries management measures. Of the comments received, two comments supported the status quo. There was approximately equal support for Option 2, recreational permits, and Option 3, reducing effort. Similar to the commercial measures, there were more comments in favor of Option 4, close fisheries with exception for systems that are sustainable, than for a coast-wide moratorium.

Additional comments that were made included statements that river herring populations had declined; that river herring are an important ecological, cultural, economic and historic resource; that management cannot be one size fits all; advocating for better or increased recreational monitoring. Statements were made that predation by

striped bass and catfish are severely impacting river herring populations. Statements were made supporting the upcoming river herring stock assessment. That concludes my report on the public comment summary.

CHAIRMAN DIODATI: Questions for Kate? Okay, Kate, who is going to give the advisory panel report?

ADVISORY PANEL REPORT

MS. TAYLOR: Mr. Chairman, I will be giving the advisory panel report. Staff is handing out a memo from our recent advisory panel meeting that was held on January 9, 2009. The general comments that were made during this AP meeting included that river herring play a significant role within the ecosystem as a forage species; that river herring are an important cultural, social and economic part of many communities. The AP was very concerned about the high incidents of bycatch.

Recommendations that the AP had concerning Amendment 2 included on the commercial fisheries management side that the management board should not adopt the status quo. With regard to regulation of bycatch, the AP believes that the problem of bycatch is significantly impacting river herring populations. The AP believes that the commission should continue to work with the New England and Mid-Atlantic Fisheries Management Council to ensure that bycatch of river herring is minimized.

The AP would like to endorse Option 4, close fisheries with exceptions for systems that are sustainable. However, they endorsed this with some modification. On the second page of your document they have five issues that they believe that they would like the commission to take into consideration with regard to Option 4.

The AP believes that the immediate closure requirement contained in this option makes this in essence very similar to Option 5, a moratorium. In lieu of an immediate closure, states should be given a specified amount of time to create a fisheries management plan to document sustainability and develop monitoring programs. During this time period, states would be required to reduce effort from current levels.

The AP prefers the methods described in Option 2A or 2B, but regardless states should be required to implement measures that can actually show a quantifiable reduction of effort. The management board should develop a standard definition of

sustainability for river herring stocks. The AP defers to the technical committee to develop an acceptable timeline for the creation of such fisheries management plans. If states do not meet this timeline, then in-river commercial fisheries should be shut down.

With regard to the recreational fisheries management measures, the AP endorses both Options 3B and 3D for systems that have a sustainable fishery. On the monitoring requirements, discussion on the monitoring requirements contained within the document took place by e-mail after our meeting was held. Four members of the AP supported the monitoring requirements in the document and two AP members expressed their opposition to the document. Thank you, Mr. Chair, that concludes my report.

CHAIRMAN DIODATI: Kate, is there any other guidance from either the AP or the public comments that we have to hear? How about the technical committee; is there any additional guidance that might be of value?

TECHNICAL COMMITTEE REPORT

MR. SADZINSKI: Mr. Chairman, back in February 2008 the technical committee presented before the board its comments concerning the then developing Amendment 2, and I would like to go over them again, if I could, please.

I am going to go right to the consensus statement. This says the TC acknowledges that data for river herring stocks are limited. However, the TC affirms that stocks are generally declining coastwide with exceptions. The relative impacts of recreational and commercial fishing on river herring stocks are unknown in many rivers.

The TC recommends the board requires elimination of directed fisheries until a state can demonstrate that the stock can support a fishery; mandatory reporting from directed fisheries, inshore, nearshore and in-river bycatch; mandatory reporting of bycatch and discards from all fisheries.

Concerning at-sea bycatch, the TC is concerned that at-sea bycatch may be a major contributor to stock declines. The TC would suggest requiring mandatory reporting of bycatch, discards and landings of river herring from at-sea fisheries. Observer coverage should be increased to levels that would allow for reliable estimates of bycatch from the entire fishery or fisheries. The board can reinstate fisheries if evidence shows that the stock can support a fishery.

Concerning the recreational fishery, the TC recommends that the board requires elimination of river herring harvest unless a state can demonstrate that a stock can support a fishery; reliable and quantify recreational harvest when allowed. Here again the board can reinstate fisheries if evidence shows that the stock can support a fishery. Thank you, Mr. Chairman.

CHAIRMAN DIODATI: Okay, thank you, Bob. Now we're back to some board discussion. I hope that some of you had an opportunity during lunch to talk this over.

MR. R. WHITE: Has the technical committee looked at the amount of rivers where there is no regulation at the present time? It seems like the states have taken a lot of action; a number of states have taken a lot of action, so what percentage of the rivers would need further action at this time?

MR. SADZINSKI: Obviously, the data is very limited when it comes to river herring. We looked at, I believe, the similar rivers that we did for the shad assessment, which is approximately 40 river systems. I do not know what would be included other than those 40 river systems.

MR. R. WHITE: I guess my question is that some states have already taken moratoriums and other states have implemented regulations, so there is any sense of how many – what percentage of the rivers that now have regulations; what percentage is left unregulated that need regulations?

MR. SADZINSKI: Well, I guess you have to look at the stock assessment as far as what river systems would be declining. Off the top of my head, I would assume probably half.

MR. GROUT: Wouldn't the information on what state regulations and what rivers have regulations applying to them currently be in the plan review that we do every year; wouldn't there be a list?

MR. R. WHITE: I guess what I'm trying to get at is the magnitude of the problem. In other words, if a fairly large percentage of the rivers already have regulations implemented and then a percentage of the rivers that are left may not be stressed; in other words, can we narrow it down to a smaller amount that we would have to deal with?

CHAIRMAN DIODATI: Yes, I think that gets back to one size doesn't fit all type of logic. I think that has been well established in the discussion prior to

lunch. Given the public comment and the advice that we got from the advisory panel and I think there is an underlying sentiment of the board that the status quo is not going to cut it.

There are elements of this amendment that I think we need to look at very closely and do our best to craft strategic measures to adopt here. What I do agree with is that we're not ready to do that today. I think similar to my suggestion before lunch that we form a working subcommittee of board members to work with the PDT to do several things.

I think we also need letters to the Mid-Atlantic and New England Fisheries Council that expresses the concern of ASMFC relative to the health of the river herring stocks and what we view as our role versus their role. I think we also need to come back here with selected options that may be modified and well defined that currently exist in this draft for us to adopt.

And, thirdly, I think we need to specify in this amendment what will qualify for an addendum because I think we want to be prepared to modify and improve this amendment by addendum once we get additional information from the technical community. That is my suggestion and we should have discussion on those lines.

MR. JACK TRAVELSTEAD: Mr. Chairman, I was just going to ask if you wanted a motion on the table to do what you have just suggested.

CHAIRMAN DIODATI: I don't think we need a motion to delay adopting this amendment today, but I think that by a consensus agreement we could just form the working group. I don't think we need a motion. Do we need a motion?

EXECUTIVE DIRECTOR JOHN V. O'SHEA: I wasn't in all the morning meeting, but just as long as you're confident that anybody that might have concerns about delaying it has had a chance to express those concerns.

CHAIRMAN DIODATI: That is a good point; that will open up the discussion to the motion. While someone is working on that motion, Jack, I will go to Bill.

MR. GOLDSBOROUGH: Mr. Chairman, given the amount of time that has been put into this over the last couple of years, I guess I'm wondering would this approach presuppose that this board cannot reach agreement or reach consensus on a workable set of

options for this amendment today in order to continue it on this timeline.

CHAIRMAN DIODATI: It is my impression from earlier discussion that there seems to be a common concern with a good number of board members that the options need to be more specific; that some definitions such as what is a sustainable fishery, what is that measure that needs to be developed; and what are the most basic provisions of protection that should be in place everywhere; those sorts of things that are not popping out in the options as they currently read. They're very broad and fairly generic.

I think there is also concern about the amount monitoring requirements and cost burden that would be on the states, so I think that needs to be put into a practical recommendation back to the board. That is my feeling here. I think everyone agrees that the status quo is not appropriate, that we need to go forward with something more stringent than we have now and we need to be much more reactive. It is just that we're not ready to do that today.

MR. STOCKWELL: Mr. Chair, I think your proposed approach makes a lot of sense. The creation of a subgroup I think will help us spin through the options that are in the addendum. I am having a hard time, though, thinking about how we're going to deal with the habitat and bycatch issues that have been raised both by the AP and many of our commenters.

Not long ago – was it December, Bob, that the commission has already sent the New England Fisheries Management Council a letter on the bycatch of river herring in the directed Atlantic Herring Fishery. As we have talked before lunch, we're on our way with an amendment. It might be helpful to send both councils a letter that talked about all small-mesh fisheries and expand that thought process.

There is a lot of crossover between members of the commission and the councils so I think we can all take it forward and continue to move that ahead, but I am not sure it is going to happen in a timeframe that we all expect it to. Amendment 4 is a huge document. As most folks know, we're struggling with the ACLs and AMs which are going to take priority over the monitoring component. So it may be several years before we get a monitoring program worked through the council process so I just wanted to put that on the table for everyone to know where we are at.

MR. SIMPSON: Actually, what I took away from the morning's discussion was a very strong feeling that given the diversity of stock status and specific issues and condition of the resource system by system that I thought we were moving toward a line of logic that would leave it to the individual states or jurisdictions that share the water body to decide what is most appropriate to do.

For example, mentioned during the break we have six people who work on anadromous fisheries in Connecticut. That is of 20 people, six of them work on anadromous species, so they're certainly drawing a great deal of attention in our state. That is doing work on research, monitoring, fish passage, stock enhancement. You name it, we work on it.

There have been millions of dollars spent on this fishery. I think there has been a consistent commitment on the part of all the states to work on this species. As Doug said and as I have said, I think the role of the commission, when it comes to fisheries management, is to make sure that the actions of our fisheries don't impact your fisheries.

In the case of river herring I think we have largely addressed that, bycatch notwithstanding for the moment. When we're limited to in-river fisheries, I think the state itself, or the states if there are shared jurisdictions, they're in the best position to assess that resource and identify the most appropriate management for them.

Again, in the Connecticut River we felt the most appropriate management action for alewives and bluebacks was to close the fishery. We did that six years ago. We didn't need the commission's help to do that, frankly. We saw the need ourselves and took the action ourselves. I think certainly every jurisdiction around the table has that ability and has that responsibility.

I was actually going to suggest that one of the things that we need to do in terms of focusing on common concerns is the bycatch issue, and perhaps, you know, look at SBRM model that is used for federal fishery management plans to estimate the appropriate level of sampling required by a fishery coastwide; to use that model for not just for alewives and bluebacks, frankly, but for all commission species. I think we need that.

The need for bycatch monitoring isn't exclusively for alewives and bluebacks. It applies to every fishery we manage. It is an important issue, but, certainly, we need to look for the mechanism to do that. I don't

know what the venue for that is, if that is something we would have to ask some for of Susan Wigley's time up at Woods Hole to do; or if our technical people had access to it, if they would be able to run it.

I don't know the answer to that, but I would suggest that one of the things that should come out of this is pursuit of that to get an estimate of how much bycatch monitoring in what fisheries would be required to get an estimate of alewife and blueback and for that matter American shad bycatch, a sufficient estimate to help us guide management or inform management; how big a problem is it.

That is the big question we're facing; how big a problem and how big a sampling program in what fisheries. We have talked a lot about Atlantic herring. There is also the Atlantic mackerel fishery. If you remember – and it is in the documents we were provided, the work that Matt Cieri and others did. There were small-mesh inshore fisheries that had quite a bump, so there is a lot of information to be gleaned from there.

We have talked a lot about sea herring, I will say that again, but it is not exclusively a sea herring issue. We need to look more broadly – and, frankly, we need to get that number and back up say, okay, how much is it going to cost? Is this a multi-million dollar endeavor? We should know that. Maybe it is not but we need to know that before we go and require it of everyone.

So, I was actually coming to not wanting to bring more back to the technical committee. A lot of times we don't want to deal with something so we hit the ball back over on to their court and say, "You guys study it further; you know, study it a little bit further." They have already several hundred pages here, a tremendous amount of information.

The amendment itself and all the supporting assessments, I don't know how many pages it is but it is a lot of reading, I'll tell you. It must have been a heck of a lot of writing and analysis, a tremendous amount of information there to inform management decisions at the state level by itself right now. There is a limited amount of data, a limited amount of analysis, and I think they largely have what we need.

My suggestion would be to turn this into a source document for states to use and go back and manage their resources as is appropriate for the status of their resource. That's what I heard all morning long was we need to customize. You can't write one

prescription for everybody in the room, for every resource on the coast. You have to look at the individual case and prescribe as required. I think the best way to do that is not to do it here but to do it back at home.

CHAIRMAN DIODATI: David, does that suggest that you don't support working further on the amendment?

MR. SIMPSON: Yes, it does. Well, the further work should be to recraft this into a source document to be available through the website and otherwise to states to help inform their management of their resource. Certainly, there is a lot of information in there on the Connecticut River that we produced.

I think it is a tremendously valuable contribution that the technical committee specifically and the commission in general has provided and we should use that. I think we have largely addressed – bycatch notwithstanding, we have largely addressed the innerstate nature of the problem for river herring, and that is the commission's role, in my view.

CHAIRMAN DIODATI: So it may be the recommendation of this working group to follow your lead and develop that kind of a recommendation.

MS. MICHELLE DUVAL: With regard to the comments that have been made earlier around the table this morning, I am certainly sympathetic to the economic concerns that other jurisdictions have expressed being we're in the same boat. Unfortunately, we had to shut our fishery down in order to get some money to do some of the monitoring that we have been fortunate enough to be able to do.

I am definitely sympathetic to imposing a one-size-fits-all approach. I also agree with Bill Goldsborough's comments earlier on the ecosystem role for that species. I like what I have heard just in the last few minutes about addressing ocean bycatch. Again, not to put more work on the technical committee, but I think if we can be very specific on some of the things that we would like them to address; for instance, what defines a sustainable fishery and what defines excessive bycatch.

I certainly have some ideas about a definition of a sustainable fishery just based on some of the things that we have done in North Carolina. Our commission is very interested in this issue, and they have spent a lot of time and heartache on that at the

state level. It is going to be really tough for me to go back to North Carolina and basically say that this body doesn't appear to have taken action to move forward.

I like the idea of putting together a working group, a subset of this board, to work on some of these issues. I am just wondering along the lines of the recommendations that were made by the AP that if folks would be willing to, at a minimum, just move forward today with – for those jurisdictions that feel that they do have sustainable fisheries in some of their river systems to start developing a proposal for those fisheries, using the information that they have at hand, why they believe those fisheries are sustainable. That is something that I would just throw out there. Thank you.

DR. GEIGER: Mr. Chairman, a few minutes I think you laid a very good, sound recommendation and certainly I support where you were proposing to go. I am also particularly struck with the well and thoughtful advice given by the advisory panel comments. I thought those comments were very strong, very valid and very relevant to what we're trying to do. Again, Mr. Chairman, I support your proposed approach. Thank you.

DR. KRAY: Mr. Chairman, one of the things that came out of this morning's meeting, at least in my mind, and I think the working group is going to have to address this – and Michelle talked about the state of our economy – is the issue of the various states and entities not being able to comply with the monitoring requirement because of the lack of resources to do that. I think that another issue that is going to have to be addressed.

Secondly, and you probably know this, but any letter we're going to craft to go to the councils should be done rapidly if you want to get it to them by next week because that is when they're meeting. The New England Council is meeting Monday through Wednesday and the Mid-Atlantic is from Wednesday until Friday.

MR. AUGUSTINE: Mr. Chairman, I think most of the speakers before me have covered the bases, but I was of the sense that we were going to move forward to develop this group of four or five, whatever, and they were going to be in a close working relationship with the PDT. I like the idea of taking Michelle and Gene's comments about let's get the advisory report to be a part of that information that we move forward to them. I would only go back to what our Andy Kahnle and Kathy Hattala said.

There were two or three very direct suggestions that the PDT should look at in terms of moving this forward. Then relative to whether or not we should make a motion to table this or not, I would only refer you to the direction of agenda and the board action for consideration was approval of Amendment 2, so you may be right, Mr. Chairman, we may not. But to make a formal, overt move saying we're needing more clarification and more definition, if need be I would make a motion to table until the next meeting.

CHAIRMAN DIODATI: Well, I am going to go to Jack before we do that.

MR. TRAVELSTEAD: Mr. Chairman, while I understand Connecticut's desire to sort of move along on a state-by-state basis and Connecticut has done all they can possibly with their moratorium, based on what I heard this morning I am convinced that we have a coast-wide problem with river herring, and that if we fail to do anything here today it is only going to get worse.

Based on North Carolina's comments I am afraid there might even be some backtracking on the part of some of those states who have done so much in recent years. I think there is some basic level of protection that we probably all could adopt. I don't know what it is today, but I think the subcommittee that you have recommended forming could help us with that, working with the technical committee and the report from the advisors.

With that in mind, **I would like to move that the chairman establish a subcommittee for the purposes of developing more specific options, including some basic level of resource protection that all states would be required to adopt; that they look at definitions of what constitutes a sustainable fishery and excessive bycatch; and that they report back to this board at the next meeting in May.**

CHAIRMAN DIODATI: Thank you, Jack, are you satisfied with the way that reads?

MR. TRAVELSTEAD: It should say "a definition of what constitutes a sustainable fishery and excessive bycatch"; then on Line 4, after the word "protection", "that all states must adopt".

CHAIRMAN DIODATI: And I had a second from Pat Augustine and others.

MR. GOLDSBOROUGH: I was going to say that my preference would be for us to try and move

forward with the amendment today, but realistically I understand we can't do that. I like what Jack is proposing. I did want on a little more conceptual note comment a little further than Jack did with respect to the point brought up Dave Simpson about states the having the prerogative to manage those fisheries themselves.

I certainly do support, as I said earlier, a river-specific approach to managing these individual runs; but have said that, what that means is the fishery takes place in the rivers and you manage them according to the health of that run. But having said that, I think these are still migratory stocks that do have value along the whole coast in an interjurisdictional manner, so I think it does behoove this board and this commission to not settle for a source document as was recommended, but to have an FMP along the lines of what Jack was describing. I support that motion.

MR. ADLER: Mr. Chairman, if I may ask whether Jack's motion here; is that to use what we have already taken to public hearing or to come up with different options that perhaps weren't in the document, in which case we have another little problem later on down the road, or to work within the options that we have.

CHAIRMAN DIODATI: I believe the intent was to stay within the framework of the amendment that has been brought out to public hearing.

MR. TRAVELSTEAD: That is the intent of the motion. The options in the amendment are so broad I don't think we will have any problem there.

CHAIRMAN DIODATI: Discussion on this motion? Jack.

MR. TRAVELSTEAD: Just one last comment; you know, from time to time states need a little push to do the right thing, and states who have done the right thing occasionally need to be propped up, and I think that is what this motion is about.

DR. GEIGER: Mr. Chairman, I think this motion is very appropriate and timely and I will support it. Thank you.

DR. MALCOLM RHODES: Well, originally it stated that the subcommittee would report back in the May meeting; does that need to be part of the motion so that we have a time limit on it? Second, it would be separate from this, I expect, but do we need to draft some motion to send to other councils to ask

them to begin looking at bycatch or monitoring the bycatch in the fisheries that they have control or jurisdiction over?

CHAIRMAN DIODATI: I don't know if Jack wants to perfect the motion to put a date in it, but it was my intent that we would come back in May. I guess we will talk next – if this motion is passed, we will talk next about forming the sub-board and how they're going to meet. I think they're going to need to meet about twice between now and the May meeting, perhaps.

MR. TRAVELSTEAD: Mr. Chairman, my intent was that we report back to this board in May, if we could add that to the motion.

DR. KRAY: We had talked about that meeting with the plan development team; is that still what we want to do?

CHAIRMAN DIODATI: I think it would be important for this working group to meet with the PDT and –

DR. KRAY: So that should probably go in the motion as well.

CHAIRMAN DIODATI: I think the PDT has members from the TC, right? I will go to the audience in a minute. Roy.

MR. ROY MILLER: Mr. Chairman, if this motion were to pass – and we're supportive of this motion – one of the things that the subcommittee might want to take a look at when they're deliberating measures is this issue of the harvest of river herring for use as live bait. Many jurisdictions have taken some previous regulatory measures to try and bring that potentially destructive practice under control because most of it occurs where the stocks are most vulnerable, at the base of spillways during their spawning runs.

To that extent, many states have taken already some measures to restrict that particular fishery. Whether you want to call it a commercial or a recreational fishery, it depends on your individual definitions, but I would urge the subcommittee to look at that one as something that may have applicability coastwide. Thank you.

CHAIRMAN DIODATI: More comments from the board? I'll go to the audience. Mr. Leo.

MR. ARNOLD LEO: Arnold Leo, consultant for commercial fisheries, Town of Hampton. The

workgroup that is to examine this, I wonder if they would make clear who is to pay for the increased observer coverage and for the portside monitoring. Will it be the states; will it be the fishermen, or perhaps they could include the top options, a state shall pay for the observers or the fishermen shall pay for the observers.

I have heard this morning many states talk about their budget restraints. I think you might know that the commercial fishermen also have budget restraints, and these observer days at sea cost roughly \$800 a day, so it is not a small item. Thanks.

MR. JEFF KAELIN: Mr. Chairman, I am Jeff Kaelin from Winterport, Maine. I came to the microphone for the Sustainable Fisheries Coalition. I represent Lund Fisheries. We have provided you with a summary of our comments on this amendment. I am really here to speak I think in support of the motion and the posture that the board finds itself in at the moment.

I think Mr. Stockwell already explained that I think you have already sent a letter to the New England Council about bycatch, and we are pursuing that issue there with Amendment 4. If you do send an additional letter to either council, we would hope that you would identify the fact that there is bycatch of river herring in literally every small-mesh fishery between Maine and North Carolina.

In that context I would like to ask that the board consider inviting people from the Northeast Fisheries Observer Program here in May to review the data that the New England Council specifically reviewed – at least their Herring Committee did just last week – which will give you a real good sense of how ubiquitous river herring bycatch is in literally every fishery in New England; not only the herring fishery, which we work in, or the mackerel fishery.

I also wanted to comment for a second that we have been tracking this issue both with your own groups here and also at the New England and Mid-Atlantic Council for a couple of years now. When we attended a meeting of the Herring Plan Development Team meeting where river herring bycatch was discussed, Mike Armstrong, who we have a tremendous amount of respect for, attempted to look at the problem from the perspective of how river herring behave essentially in the ocean and how it may interact with Atlantic herring when they're swimming in certain areas at certain times of the year; and Atlantic mackerel, on mackerel he said that the mackerel tend to swim so fast that it is not

common for river herring to commingle with mackerel schools to the extent that they do with Atlantic herring.

I thought that was really interesting; I hadn't heard that before. We're obviously very interested in understanding behavior to determine whether we can do gear modifications to try to avoid river herring in the herring fishery specifically. Of course, there has been river herring in the herring fishery for probably a couple of hundred years now.

As most of you know who have been on this board for years, we've only shown up here over the last couple years out of your concerns. We share the concerns; we're trying to respond to the issue and we only ask that again if you contact the councils, that you talk about your concern for bycatch not only in the herring fishery but in all the small-mesh fisheries in the regions. I think that is really all I wanted to say and I appreciate the opportunity to speak. Thank you.

MR. PIERCE: Jeff Pierce with the Alewife Harvesters of Maine. Habitat, habitat, habitat; no habitat, no fish. We feel that the states should run their fisheries for the reason that habitat degradation is different in every state and every river. Fish passage is also the issue with that. It should be done on a river-by-river basis as one pill does not fit all diseases. Everybody needs to realize that you can't solve a problem in Maine and make that problem work for North Carolina, Connecticut or any state. I would urge you to look at state-by-state, river-by-river when you're making any decisions. Thank you.

MR. MOUNTCASTLE: Brooks Mountcastle, Marine Fish Conservation Network. The Network believes that there is enough information for the commission to act on this amendment today. I think you have heard overwhelmingly that there is a significant concern about bycatch, especially.

In addition to the over 300 letters that were generated, one of those letters generated 100 signatures from organizations from Maine to South Carolina, including Trout Unlimited, many river keeper organizations, fly fishing groups. I think there is a considerable recognition from the public at large that this issue is serious and it needs to be addressed and that time is not our side.

I would like to ask the maker of the motion to consider some reference that when this letter is sent to the Mid-Atlantic Council encouraging greater cooperation towards this effort, that this effort be

done sooner rather than later. Hopefully the commission can make a recommendation that this letter be sent to the councils so we can get moving on this issue. Thank you very much.

MS. BONNIE BICK: My name is Bonnie Bick and I am with the Mattawoman Watershed Society. I am here to say that we're working to save a particular tributary of the Potomac Mattawoman. We have been fish monitoring and have noticed a collapse in the river herring in the Mattawoman, and we're very concerned about it. It seems to be the most sensitive.

We think that we would like to see this measure. We did support the letter that was just referred, and we would like very much if there could be action on this today. If you could consider that I think it would of benefit to the fish. I would like more work – I know it is difficult – in protecting the habitat because there is an expediential grown in many areas that is destroying the ability of the water quality to support the fish. Thank you.

MR. PAQUETTE: Once again, Patrick Paquette, Massachusetts Striped Bass Association; and in the interest of full disclosure, also the head of a group of recreational organizations throughout New England that identifies itself under a political initiative known as Honest Bycatch. I would also like to support – I think the commission has gone through a process, the public has commented, and we would like to see at least options gone through and what can be done today done.

I caution that we're approaching another year – that it sounds like an adjusted timeline would probably mean another year before this amendment would actually probably be in place, you know, another year of putting out, and I don't know how many years we have left. There was a lot of discussion that I didn't see incorporated in this motion.

If the commission is going to not go forward with the amendment or only go forward with part of the amendment today, I would suggest that there may be financial resources especially for the states that have river herring listed as a species of concern. I believe there are grants under NMFS and some other opportunity for financing that could help the data collection and fill those holes that were discussed this morning.

I wanted to just caution the commission about the overall perception. A lot of different parts of – a lot of the stakeholders have stepped up in the areas where this – we're using words like "collapse" and

talking about the beginning days of the striped bass collapse and comparing it to it. It just seems like it is pause, pause, pause.

It is clear from the stock information this morning there is a multiple cause to whatever is going on with this fish. I have seen recreational fisheries step forward across the coast, up and down. We have seen directed commercial fisheries be affected and it seemed to be working. Then we get to the question of doing something about bycatch.

I would propose or comment that we don't have to do something about every single fishery that touches bycatch, but there are fisheries that we know there are large amounts of bycatch. At the New England Fisheries Management Council, we, month after month, committee meeting after committee meeting, hear the same kind of observer reports where the numbers of equal runs that have disappeared, are dumped over the side of a boat dead.

In at least three of these large small-mesh fisheries there can be a place to begin addressing bycatch. I don't think it is an all or nothing. I don't think that we have deal with all the bycatch all at once in one measure, but at least the places we know there are large, significant events we should at least get a handle on what is truly happening with that. Thank you.

MS. LYONS-GORMEN: Pam Lyons-Gormen with the National Coalition for Marine Conservation in Leesburg, Virginia. I have to say I don't support delay. We also would like to see action on Amendment 2 today. I just want to remind the commission that Amendment 2 was initiated in advance of the upcoming stock assessment because of the dramatic declines in commercial in-river landings and that the alternatives in the amendment rightly focus on what you can control now, which is reducing fishing mortality, both bycatch and directed.

That's where I would like to see this amendment go. I would like to see discussion. I have to echo and agree with the previous speaker that I do think that you can identify priorities for looking at bycatch and that you should look at the high-volume fisheries that overlap with the migratory pathways of alewives and blueback herring. There is evidence that it occurs in the mackerel fishery.

If you look in the standard bycatch reporting methodology amendment and the description of the Mid-Atlantic Mid-Water Trawl Fleet it says right there, 250,000 pounds of blueback herring landing,

not discarded, landed – it doesn't include discards – annually. There is evidence and there are places to start, and I think that you should move forward today.

If you do go forward with this motion I think that another task of the subcommittee needs to be looking at funding. We kind of mentioned that further, but there are special grants. These are species of concerns; it opens up grant opportunities. I think if funding is going to end up being the obstacle or the excuse not to move forward, then we certainly need to at least spend some time trying to look at what some potential funding sources could for the states that need it. Thank you.

MR. PLACE: Kelly Place from Williamsburg, Virginia. Regardless of which way you all vote on this motion, I do have one suggestion of an additional category that maybe should be included in there. After "sustainable fishery", perhaps a comma and say "excessive non-native species predation" because I can't emphasize enough just how important this is in the bay except to tell you that in four straight years of fishing many-sized nets in the same place during a sturgeon survey and measuring every single fish that came aboard, of the non-native blue catfish, which we were originally told would never go into the saltwater, and we were in the saltwater, we caught more by number and by weight of the non-native blue catfish than of all the other species combined.

If you talk to the scientists that have followed this issue in Virginia since the inception, they will tell you and they have predicted for a long time that there will be a trophic collapse, and it will first happen in the Rappahannock River. I think that the James may be next, I don't know. It may be the Piancatank or the Mattaponi, but I can't emphasize enough that in Virginia – well, the Chesapeake Bay waters now – these species which weren't supposed to spread past freshwater are not just adversely affecting every single diadromous species that we can tell, except perhaps sturgeon and striped bass, but it is just a problem of massive proportions.

I will ask the people that are on the river and see this every single day to send you a letter with hundreds of firsthand observations that they have made. I think if you will just look at some of that, you will realize that the non-native predation is at least one of the worse if not the worse problem for the restoration of this species in the Chesapeake Estuary. Thank you.

CHAIRMAN DIODATI: I am going to move back to the board for any final comment. Bill.

MR. ADLER: Mr. Chairman, is there any chance that we can get by the next – if this passes and we move ahead on this particular path – that we can get any more information on some of the things such as where these fish – where the river herring do migrate to and/or – and also more on the levels of bycatch than just a couple of wordings that there was a big catch, and then I've heard also there wasn't any catch – can we get any of this because we're trying to make an educated decision on whatever finally does get up for a decision.

It would be nice to know if we can get anymore of this information like at a certain time of the year there is a whole bunch of them – I'll just pick Block Island – off of Block Island or wherever, because that might help in a decision made as to whether we should monitor bycatch or whether we should restrict bycatch or whatever if we had something to go on.

I've just got a blur here as to how these things – there is no information on them or very little, I should say. So, is there any way we can get more of that information before we start to really make some of these decisions?

CHAIRMAN DIODATI: We can only hope. I can't guarantee that there will be new information. We already have information about where there are potential bycatch problems in certain areas and times of the year have been identified, and I don't think it is going to change. I think it is pretty clear that we have identified those times and areas. If this motion passes, that information will be made available to the workgroup. That is the kind of information that should be echoed in letters to our councils as well.

MR. ADLER: Yes, I think that would help, Mr. Chairman. Thank you.

CHAIRMAN DIODATI: Any final comment here and then we will caucus a few minutes? Okay, we will caucus for about two minutes.

(Whereupon, a caucus was held.)

CHAIRMAN DIODATI: Are board members ready to vote on the motion that is on the board? Jack, will you read the motion, please

MR. TRAVELSTEAD: Move that the chairman establish a subcommittee to meet with the PDT for the purpose of developing more detailed options, including a basic level of resource protection that all states must adopt, as well as definitions of what

constitutes a sustainable fishery and excessive bycatch, to be reported on at the May Meeting Week.

CHAIRMAN DIODATI: All in favor of the motion raise your right hand; opposed, same sign; abstentions; null votes. **The motion passes unanimously.** As far as putting together the working group, do we have a volunteer or two? I see Terry, Michelle, David, Douglas, Bryan, Steve, Jaime. That is a large group. Malcolm wants to be on there as well.

DR. GEIGER: Mr. Chairman, certainly, again, there more than enough folks willing to volunteer. Certainly, I think this group needs to be manageable and needs to be engaged. Again, certainly from my perspective if I can participate and help in any way, I am available to do so.

DR. KRAY: Mr. Chairman, in the course of our discussion here we were talking and one of the things we would like to work in – we thought about asking Jack to put it in the motion but then thought better of it. One of the issues we have been talking about is the amount of bycatch in the ocean. If we could get a more definitive report – if they could look at that and give us some kind of what is the magnitude of that bycatch.

CHAIRMAN DIODATI: Well, I would ask someone to be considered to chair of this group and perhaps put together a list of questions like that for the TC to provide the group at their first meeting. I envision this being no more than two meetings between now and our next gathering in May. I didn't anticipate the group being this large, but I just hope that it is going to be manageable. Doug.

MR. GROUT: If you're looking for making it more manageable, I'll be glad to opt out. I'm more than willing to do that, but I also will offer my services if people think it will be valuable. I know those things can be cumbersome when you get too many.

CHAIRMAN DIODATI: Okay, just make sure Kate has everyone's name. When we adjourn, please meet with Kate and we will have a meeting. Forward your list of questions to Kate. Okay, the next item of business has to do with Amendment 3 to the Shad Plan. Kate is going to give an update and then Bob is going to give some comments from the technical committee.

DRAFT AMENDMENT 3 TO THE SHAD PLAN

MS. TAYLOR: My update is essentially what the technical committee comments are so I defer to the technical committee chair.

TECHNICAL COMMITTEE REPORT

MR. SADZINSKI: Again, the TC met via conference call on 7 January. Copies of the Draft Amendment 3 were distributed one and a half days prior to this call. Due to the limited time to review this approximately 150-page document, the TC did not approve the amendment. The TC would like to acknowledge the PDT for their extraordinary efforts in compiling this document. The TC would also suggest continuing Amendment 3 with the TC review completed by 15 April, which means it would go to the board in May. Thank you, Mr. Chairman.

CHAIRMAN DIODATI: That was short. Questions of Bob or Kate? I don't think we need a motion for this; there is no action required; perhaps just an update as to what we would expect the next action to be in this. Will this amendment be coming back to us in May as well or at a later date?

MS. TAYLOR: Mr. Chairman, in May I will present the overview of Amendment 3 for American shad and the board can consider approval of that document for public comment at that time or for additional review and development by the plan development team if so needed.

OTHER BUSINESS

CHAIRMAN DIODATI: Okay, anymore discussion on this issue? I guess we're ready for other business. Is this any other business to come before the board? Vince.

EXECUTIVE DIRECTOR O'SHEA: Mr. Chairman, this morning I received an e-mail from Dr. Siddel and Dr. Chadwin. I am sort of reading this, but it is from the National Fish and Wildlife Foundation. They have invited to participate in a strategic planning exercise in D.C. regarding river herring.

There is a sentence there, "Due to their ecological importance as a forage fish, the concern over their conservation status and their important indicators to the status of marine and freshwater environments,

river herring were selected by the National Fish and Wildlife Foundation Board of Directors to be a focal species for a new outcome-focused diadromous fish initiative. The business plan will guide the Foundation's investment in this initiative."

The invitation came to Kate, Bob Beal and myself, and we need to reply by Friday. My initial thought in bringing it up now is this seems like a very appropriate thing and it would be of interest of the board. I would hope that we would be able to, either working with the technical committee or working with some of our states, have a relatively short list of doable things that we would be able to maybe bring to this meeting to be able to contribute.

I guess I am sort of asking, Mr. Chairman, and alert board members and then maybe to line up support for a quick response if we have asked for some input that people would be able to get back to us.

CHAIRMAN DIODATI: Yes, I think the timing is very opportune. Are there any board members that have questions on that? I don't think Vince has many answers; he only has an e-mail in front of him.

MR. ADLER: Vince, what type of things are you looking for in terms of questions; what type of questions are you looking for?

EXECUTIVE DIRECTOR O'SHEA: Well, their invitation is to participate in a two-day meeting to develop a conservation strategy for river herring. That is over at the Foundation so I think if this board is a representative of the fishery managers and we have things that we have mentioned are sort of outside our capacity, both habitat restoration as well as funding for research, data collection and things like that, I would think those would be two issues we would put on the table for them and say, "Here is a habitat thing you can go after and here are some funding things that you could throw money at that would help us a lot." That is what I am thinking of.

MR. ADLER: All right, if I may, Mr. Chairman, that is very good, I think, because that is exactly the problems that we're facing here is if we do want to ramp up the monitoring and reporting and all that stuff, our problem here is we don't have the money. If they're that interested in this species, there is where they can help.

Habitat, as you mentioned, is another very good point which we have trouble trying to do, water quality issues we can't seem to do, and yet we know that

those are problems, so I think that is very good, Vince. Thank you.

CHAIRMAN DIODATI: Yes, this sound like a tailor-made source of funding that will address many concerns of the board.

DR. GEIGER: Mr. Chairman, the Service has participated with the Foundation on development of several other business plans using this model. I would highly recommend we take full advantage of this opportunity. It will give us I think another forum to get another advocacy group engaged in it; and plus I think it will set the stage for possible additional funding to meet some of the high priority needs that we're all looking for. Thank you, Mr. Chairman.

DR. KRAY: Not a question but a comment, and Bill Adler triggered it when he was talking about the various things and possibilities. Another one, of course, is in the amendment and that would be observer coverage. I don't know how the mechanics of that would work because it would probably be on ocean-going boats, but look for observer coverage on those species who have a large bycatch of river herring. That could be possibly put into the proposal.

CHAIRMAN DIODATI: Well, I think there is a very strong, positive signal from the board; so unless you need anything from us, Vince, we will rely on you and staff to send a positive response back. If you need a list of information, we will just look for an e-mail, I guess.

EXECUTIVE DIRECTOR O'SHEA: That's great, Mr. Chairman, thank you.

CHAIRMAN DIODATI: Any other business to come before the board before we adjourn? Yes, Terry.

MR. STOCKWELL: Mr. Chair, just a confirmation that a letter or letters will be sent concerning the board's concern for a small-mesh bycatch to both councils.

CHAIRMAN DIODATI: Yes, that will be done. We have to reconcile a few things with that. I thought it would be best for this group to help work drafting on this letter. There is some indication from board members the timing is important to get that out in the next few days. I also question whether it should come from this board or the policy board. We will resolve those questions, but it is our understanding here that a letter will be going forth to both councils in support of shad and river herring protection.

ADJOURN

Any other business to come before the board? Seeing none, before we adjourn, those interested in working on that subcommittee will come up here and meet with Kate so we have a final list. Thank you; we are now adjourned.

(Whereupon, the meeting was adjourned at 2:28 o'clock p.m., February 4, 2009.)