

**PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
WEAKFISH MANAGEMENT BOARD**

**May 10, 2006
Arlington, Virginia**

ATTENDANCE

Board Members

Paul Diodati, Massachusetts DMF	Bruno Vasta, Maryland Gov. Apte.
Bill Alder, Massachusetts Gov. Apte.	A.C. Carpenter, PRFC
Vito Calomo, proxy for Rep. Verga (MA)	Rob O'Reilly, Virginia MRC
Mark Gibson, Rhode Island DEM	Kelly Place, proxy for Sen. Chichester (VA)
Gil Pope, proxy for Rep. Naughton (RI)	Louis Daniel, Chair, North Carolina DMF
Everitt Pertonio, Rhode Island Gov. Apte.	Pres Pate, North Carolina DMF
Eric Smith, Connecticut DMR	Damon Tatem, North Carolina Gov. Apte.
Lance Stewart, Connecticut Gov. Apte.	Jimmy Johnson, proxy for Rep. Wainwright (NC)
Gordon Colvin, New York DEC	John Frampton, South Carolina DNR
Brian Culhane, proxy for Sen. Johnson (NY)	Robert Boyles, South Carolina DNR
Pat Augustine, New York Gov. Apte.	Susan Shipman, Georgia DNR
Tom McCloy, New Jersey DFG&W	John Duren, Georgia Gov. Apte.
Erling Berg, New Jersey Gov. Apte.	Gil McRae, Florida MRI
Roy Miller, Delaware DFW	April Price, Florida Gov. Apte.
Timothy Targett, Delaware Gov. Apte.	Tom Meyer, NMFS
Howard King, Maryland DNR	Jaime Geiger, USFW

Ex-Officio Members

Jim Uphoff, MD DMF, Technical Committee Chair
Des Kahn, DE DFW, Stock Assessment Subcommittee Chair
Joe Lynch, NC DMF, Law Enforcement Committee Representative

ASMFC Staff

Brad Spear	Vince O'Shea
Robert Beal	

Guests

Steve Cardin

There were guests in the room. However, the attendance sheet was not circulated among the attendees in the audience.

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PAGE 25: Motion to approve the terms of reference and advisory report to the Weakfish Stock Assessment Peer Review. Motion by Mr. Colvin, second by Mr. Gibson, motion carried on page 28.

PAGE 36: Motion to accept Chris Heald to the Weakfish Advisory Panel. Motion by Mr. King, second by Mr. Augustine, motion carried on page 36.

**ATLANTIC STATES MARINE FISHERIES
COMMISSION**

WEAKFISH MANAGEMENT BOARD

**Doubletree Hotel Crystal City
Arlington, Virginia**

May 10, 2006

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The Weakfish Management Board of the Atlantic States Marine Fisheries Commission convened in the Washington Room of the Doubletree Hotel Crystal City, Arlington, Virginia, Wednesday afternoon, May 10, 2006, and was called to order at 1:45 o'clock p.m. by Chairman Louis Daniel.

BOARD CONSENT

CHAIRMAN LOUIS DANIEL: Good afternoon. Welcome to the meeting of the Weakfish Management Board. All of your meeting materials were either mailed out supplementally or on the disk. We'll be working from the revised agenda. We've got several presentations today and have some discussions that we need to bring up from the last meeting and so I would like to try to move us along as quickly as I can.

Attached are the Proceedings from our November 2nd meeting. I haven't done the agenda yet. Is there any other business that we're going to need to discuss later on today or does anybody have any concerns or questions about the agenda? If not, that stands approved and then our Proceedings from November. Are there any corrections or comments on our minutes? Seeing none, then those stand approved.

The next item on our agenda is Public Comment. I would ask at this time if anyone in the audience would like to speak to the board on items that are not on our agenda, which sort of limits it a little bit. Seeing no interest in the audience to speak, we'll move on to our first item of business, which is the Stock Assessment Report from Dr. Des Kahn.

STOCK ASSESSMENT REPORT

DR. DESMOND KAHN: Thank you, Mr. Chairman. I've been given just a few minutes to summarize some of the high points of the assessment for you. I want to go over briefly the consensus points that the full Technical Committee agree on as

a result of this assessment.

One was the stock has declined. Total mortality has increased. Third, the decline does not seem due to fishing. Something besides fishing mortality has increased and there is strong circumstantial evidence at least of an increase in natural mortality, which we call M frequently.

The landings here show that both commercial and recreational landings have declined to the lowest point in the time period from 1982 through 2003. We actually have 2004 here and they've declined sort of in parallel.

This slide here shows the total discards for both commercial and the upper line end is recreational total discards plus landings and so that's the total number estimated killed and you see that this number also has continued to decline.

This shows some of the recreational data and I want to point out one thing that maybe has not been pointed out. You see the dark blue line? Those are the discards from the recreational fishery that we estimate have survived. 80 percent of the recreational discards have survived.

Notice it's relatively low before about 1994 or 1995 and then it increases starting in about 1994 there and is relatively high thereafter, although it does come down. Now this is a benefit of Amendment 2. The minimum sizes and creel limits have caused a large increase in recreational discards and the bottom pink line there is the ones that we estimate that died, 20 percent of them.

The point I want to make here is there's a large increase in survival from the fishery, the recreational fishery, which you can see in that blue line. That's one clear benefit of the management plan that's come out in the data.

This shows the commercial landings back to 1950 and many of you may remember there was a big spike in landings in the late 1970s and early 1980s, which was sort of the boom time. Recreational landings start in 1981, but in the 1950s through the 1960s, landings were relatively low.

They increased and there was no management that caused this, that we're aware of, and then starting about here the management plan went into effect and there was some increase in landings and then the decline.

I'm going to talk some about the survey indices and the fishery dependent indices of abundance. This is the Northeast Fishery Center Fall Inshore Survey and one thing about it is that there is an increasing trend in recent years. There's also a very erratic pattern here where the -- This is the mean catch per tow. The pink is exploitable biomass and the blue is number. It shows an increasing trend, yet it is quite erratic.

This is another one of our indices, which starts in 1989, the New Jersey Ocean Trawl. Again, we have this very erratic up-and-down pattern. That tells us that these two surveys have a large amount of error and there may be some kind of year-to-year difference in availability that's causing some of these fluctuations, as opposed to an actual change in abundance of the stock.

Both of these surveys are in the ocean in the fall. The New Jersey uses August and October tows and the NMFS survey comes down in the fall, right when the weakfish fall migration is occurring along the coast. We are hypothesizing that possibly some years these surveys might hit the peak of the migration and have relatively high catches and other years they might miss the peak and have relatively low catches.

This is the Delaware Bay Survey, one of our other major age structure surveys, and here it started back up in 1990. The catches were low and then they increased and were relatively high through the mid to late-1990s and then started an erratic decline and so this survey shows a decline in the last five or six years, unlike the other two.

When we look at just the New Jersey and Delaware exploitable fish, that is legal-size fish, we see a slightly different pattern. The yellow is the New Jersey and we do see -- It kind of came down from its peak. The red is the Delaware and that came down in a fairly consistent pattern.

This other one is our other fishery. It's a fishery dependent index and it's the recreational total catch per trip, catch per unit effort, in the Mid-Atlantic region. This shows back in the 1980s there was a high period of abundance. It declined in the late 1980s and early 1990s and then came up right around the time when the management plan went into effect and then declined again and its lowest point was 2003.

There's a lot here, but what I want to emphasize is we explored three hypotheses here: the stock was increasing, the stock was stable, or the stock was declining. The only evidence in support of an

increasing stock was the NMFS and New Jersey survey of total catch per tow.

When we ran ADAPT with these, we got an increasing stock. Now, if we ran a biomass dynamics of surplus production model with the survey indices, we got a very stable, but very high, estimate that the stock was at carrying capacity and there was virtually no F, because the catches are low.

However, all these other elements indicated there was a decline in the stock. This is the landings here, but some of the surveys showed decline. The Delaware survey shows an age structure truncation. The recreational total harvest and total catch per trip have declined.

When we tuned biomass dynamic models to this recreational fishery indices, it shows the stock has declined. ADAPT, when it's tuned only to the recreational indices, and we have several for ADAPT, it shows that the stock has declined; however, there is retrospective pattern here.

If we just run an old-fashioned VPA with no tuning, it shows the stock is declining and there are other things that -- Plus, when we calculate surplus production, that has declined and even gone negative in some years.

This is our catch at age matrix, which was expressed here -- Each column is one year and the largest bubbles for that year had the highest proportion of fish. In the first year, age two was the most abundant. What we see here is that prior to Amendment 2 ages one and two were the most abundant ages in the catch.

Once we put these regulations in effect, the catch shifted to predominantly ages three and four. That shows a clear conservation benefit of the management plan and suggests that the fishery was restrained into taking more older fish.

Another test you can make of a catch at age matrix is can you follow dominant year classes through the matrix from one year to the other and this matrix can -- We can do that. Here's the 1993 year class. That was the largest we've seen in the data.

Again, here's the 1995, which was not quite as large. You can clearly see these progressing from year to year. Here we have -- I think this is the 1999 age two and age three. There is coherence in this catch at age matrix and we also see benefits of the conservation regulations.

This shows the product. Here's the landings and here we have -- What we do is we take the total numbers estimated at age caught in our catch at age matrix and multiply them by the calculated mean weight for that age and when you add those together, you get an estimated total weight from the input data and that's called sometimes the sum of cross products. That should match the landings fairly well.

Back in the 1980s, there were some obvious discrepancies. We had sparser data in the 1980s and maybe some of the methods weren't quite up to par, but as we get into the more recent period, there's a very close match and for the last three years we revised our estimation of catch weight at age and we have a very good match here.

When we take the catch at age matrix and estimate total mortality with cohort catch curves, we see relative high mortalities in the 1980s, a decline -- These year classes would be in the fishery when the regulations were put into place. They were born in 1991 or 1992, but they were in for another six years.

We couldn't get an estimate on 1993, but then we see this increase in total mortality for the recent year classes. This pattern is correlated with a pattern from the Delaware Bay Trawl Survey, which has -- The age samples come from the survey catches and so we get significant correlation between this result from the catch at age matrix and the Delaware Bay Survey, one of our best surveys, probably.

Here's some estimates of F and biomass. This is our estimate of F where it was relatively high in the 1980s, peaked in the late 1980s, and then declined in 1995 when the regulations went into effect, has been very low and stable and coming up slightly in the last few years and this is the estimate of biomass, which is really a good proxy for SSB in a species.

It was high here and it declined in these early 1990s and then built up after the regulations went into effect, but recently declined.

This shows our estimate of surplus production. It was relatively high in the 1980s and into the 1990s and then recently has declined to even negative levels in some years. Yet, our F has declined greatly, our F estimate, and although it came up a little here, certainly not on a level to cause a collapse.

This is a fit. This shows two models fit to our index of relative abundance here. The dots are the index and when we run a conventional surplus production

model, the blue line, it has a fairly good fit, 72 percent R squared, but it doesn't follow this decline in the last few years. It doesn't fit really well in here and it doesn't catch this decline.

When we put in a predator model, which in this case represented striped bass, the model then improves the fit and goes to 78 percent and it now begins to decline, as the data indicate. The fit is improved statistically and the residual pattern that we see with the conventional model disappears when we add the striped bass term here.

These are two different independent estimates of natural mortality. The red line comes from a combination of the VPA and our estimate of F that was independent of natural mortality and it shows that the M has increased in recent years. When we run the predator/prey model, we can also get an estimate of M from that and that is very closely tied to this estimate here and so they're fairly well correlated, yet independent.

The biological reference points, we used surplus production models and we got F_{MSY} and B_{MSY} estimates. Without using the predator term, the F_{MSY} -- One estimate was 0.32, quite precise. Another with the Schaeffer Model was 0.23, also very precise. The B_{MSY} ranged between 36,000 metric tons and 22,000 with these two models.

When we added the striped bass, the F_{MSY} goes up to 0.55 and the B_{MSY} is about the same, but F collapse is estimated to have to be 1.5 to cause the stock to collapse. This is biomass weight at F. That's it. That's a brief summary for you.

CHAIRMAN DANIEL: Thank you, Des. Do I have any questions for Des before we move on into the Peer Review Report?

MR. MARK GIBSON: The inconsistencies in time pattern between the fishery independent indices and the fishery dependent ones is very noteworthy and obviously has great influence on the outcomes on any of the analyses you did.

Could you give me more insight into the Technical Committee's deliberations on -- You made some points about there being erratic swings in some of the trawl survey pattern, but to me they all clearly showed a trend one way or another, the year-to-year variations notwithstanding.

It sounds like you came around to focusing more on the fishery dependent measures, particularly the

MRFSS, and could you just give a little more information on that?

DR. KAHN: Sure. One thing we did, we took this assessment to the 40th SARC in 2004 and said we didn't think we had a credible result at that point, because when we ran these models with the conventional fishery independent survey indices they showed the stock was very high and the F was very low and we didn't feel this was credible in light of the declines in catches.

They said yes, you have conflicts in your data, which was pretty obvious, but they said we should go back and do a lot more intensive analyses of the survey indices and see if we could make sense out of what was going on.

They recommended we try a recreational catch per unit effort index, which we had used in years past. After that, we did do that. We instituted the recreational CPUE index of relative abundance and we also subjected the survey data to cohort catch curves.

When we did that, we found that both the NMFS survey and the New Jersey Survey, some of the more recent year classes exhibited spontaneous generation and that is instead of a year class dying out and declining over time -- According to the indices, it was increasing and it can't happen that way.

Those two surveys we kind of downgraded after that and we basically eliminated the NMFS survey, because it was giving implausible, error-ridden results. However, the Delaware Survey does not show that.

It had no spontaneous generation and that one is pretty well correlated with the recreational index. Also, if you just look at the exploitable biomass, that is the legal size fish from the Jersey index, they're also fairly well correlated with the recreational index.

MR. JIM UPHOFF: Just to add something else, at the 40th SARC one of the portions of the VPA that seemed to be acceptable to the panel there was the converged portion of the VPA from about 1991, back something like that, and having the biomass estimates from that converged portion plus our biomass indices from our surveys, we're able to basically take a stab at estimating what patterns in catchability might be.

Essentially, what we found, for particularly the Northeast Survey, but actually any of the surveys,

would have some pretty dramatic fluctuations in catchability. It was on the order of tenfold with either pattern, where catchability actually may have increased as biomass decreased and that's the worst case and at best, it's just occasional very large fluctuations in catchability.

The MRFSS index, when subjected to that, didn't show the same pattern. The fluctuations in catchability were there, but near as pronounced and in addition, again, the MRFSS index was also, as a biomass index, correlated with the New Jersey and the Delaware Surveys, significantly correlated. Those were some additional things that we kind of tried to do after the 40th SARC to look at some of these patterns.

CHAIRMAN DANIEL: Any other questions?

MR. GIL POPE: Have there been any new studies on striped bass content, their stomach content studies? I noticed you mention bass make a difference, but I was wondering if you tried to correlate that more in any way with the weakfish studies.

MR. UPHOFF: Actually, there is some work being done through Anthony Overton at East Carolina University. I think our Department of Natural Resources is sponsoring some of it and the Chesapeake Bay Ecological Foundation where in the last two years they have looked at the stomach contents of large striped bass off Cape Hatteras and this year some off of Virginia.

They have found, in 2005, that weakfish comprised about 5 percent of the diet of these large striped bass and this year I don't have a percentage. They just finished, but the size range of weakfish that have been found in the stomachs are, so far, anywhere from about six inches to fourteen inches and according to the predator/prey modeling, it doesn't take -- It takes a very low level of consumption by striped bass, what's called dispensatory mortality, to produce this kind of decline.

Those findings are consistent, as are findings of studies done in the late 1990s in the lower Chesapeake Bay and Virginia and also in the 1970s, again, I think in North Carolina, where weakfish made a consistent, but small, portion of the diet.

Without going on and on, there are certain behavior elements that put both species at the same place at the same time searching for the same food and a forty-

pound striped bass has a considerable advantage over a ten or twelve-inch weakfish.

MR. ROB O'REILLY: Rob O'Reilly, Proxy for Bill Pruitt. I had a question for Des or Jim on the various runs that were done with ADAPT and I know that Run 20, which is the one that's documented as the one taken to peer review, was the Technical Committee choice, but I was also wondering, was there any other runs where the fishery independent data were incorporated where there was any sense by the Technical Committee that they could have been viable to use?

One thing I have in mind is I guess in 2000, Des, when you ran ADAPT then, the retrospective bias cropped up for the first time and I think in looking back from 1996 to 1998 and there was a big jump again in 2000.

Essentially, there was this pattern of negative bias on the terminal fishing mortality rate and so positive bias on the stock size and the ADAPT itself may be something that is not suitable all the way for a migratory fish such as weakfish. I know even with striped bass there have been some questions as to whether the retrospective bias is something that can be corrected for.

Do you think there was anything with a combination of fishery independent indices where there could have been a correction to that bias? I know that Jim maybe a couple of years ago actually went through that exercise, but if there's a sense that using strictly the fishery dependent index in Run 20 as the main index is something that was not the suitable thing to do, although the Technical Committee felt so, were there any alternatives, any strong alternatives?

DR. KAHN: One reason we picked that Run 20 was because, although it had a retrospective bias pattern, it was less pronounced than the ones that used the trawl surveys. However, the 40th SARC said that the reason there was this retrospective bias pattern was that the indices did not match up exactly with the catch at age data.

That's what they thought was causing this. When we ran it with the recreational indices, the bias was the other way, where it was initially -- It was underestimating biomass and overestimating F. Probably those indices were getting less of an index of stock structure than the catch at age, whereas the trawl surveys were giving a greater picture. That's why we get these shifts in these patterns.

It seems to be endemic, at least with our data with ADAPT or the other tuned VPAs, to get a problem with the most recent years and I think to get away from that we're going to have to look at maybe some other catch at age methods, such as a statistical catch at age or separable or something like that.

We did have a run where we combined the Delaware and SEAMAP surveys with the recreational index and that kind of gave an intermediate result, but, again, it still had this retrospective pattern. The most reduced retrospective pattern was in the recreational CPUE ADAPT and that's the one we chose, for that reason.

CHAIRMAN DANIEL: Anything else? If not, I would like to go on into Dr. Cadrin's report. I'll catch the audience questions later.

PEER REVIEW PANEL REPORT

DR. STEVEN CADRIN: I'm Steve Cadrin and I was a member of the Weakfish Stock Assessment Peer Review Panel and I'll be reporting on our deliberations that occurred in March, reviewing the weakfish assessment.

The panel was chaired by Brian Rothschild and he sends his regrets that he couldn't attend today and so I am presenting in his stead; Ransom Myers from Dalhousie University; Steve Martell from the University of British Columbia; and me from the NOAA/UMass Cooperative Marine Education and Research Program in New Bedford.

Without beating around the bush, we did have an overall summary, and this is the first sentence of the report, that the panel does not endorse the recommendations of the Technical Committee regarding stock status.

We'll get into the details of why that statement was made, but this is just a bullet list summarizing the points: the biomass dynamics model relied too heavily on the recreational CPUE data, excluding a portion of the geographic range of weakfish, and the model excludes information on relative stock size from research surveys.

There was insufficient attention to the fact that juvenile survey abundance indices were generally increasing over the time series. The panel felt there was too much reliance on the assumption that recent trends in landings directly reflected abundance.

The Technical Committee didn't fully consider the

substantial portion of catch being discarded. For example, commercial and recreational discards increased since 1994 and in 2003, reported discards were greater than landings. If the geographic stock structure were considered in these analyses, conclusions about the stock status may be different than those provided by the Technical Committee.

Now I'll proceed with describing our terms of reference and, again, we'll go into detail on each of these: characterize commercial and recreational catch, including landings and discards; review the adequacy and uncertainty of fishery independent and fishery dependent indices of relative abundance; review the appropriateness of constant and variable natural mortality in the assessment; review the estimates of fishing mortality, spawning stock biomass, total stock biomass for the time series 1981 to 2004 and any uncertainty in those estimates; review the biological reference points and stock projections.

We have two explicit terms of reference on the projections and one was the status quo fishing mortality and another was a reduction in fishing mortality and then, finally, make research recommendations to improve data collection and stock assessment.

I'll walk through each of those and this repeats a lot of the information that Des has just given, but I'll summarize. Despite the evidence for stock structure, weakfish along the coast is assumed to be a single stock.

Commercial landings since 1950 are estimated with moderate precision and landings since 1994 appear to be well estimated. This is starting an exercise that the Peer Review Panel conducted in which we did an inventory of the data available for stock assessment and then tried to give a quality judgment of how reliable those data were, based on information provided by the Technical Committee.

Recreational catch was not as accurate, we felt, as the Technical Committee put forward. The high discards were a concern for management. The assessment lacks dedicated age/length keys and that is samples coming from each component of catch and in lieu of those dedicated age/length keys, data are borrowed from adjacent time periods or adjacent areas or fisheries to characterize the catch at age.

There were major problems with the calculation of catch at age, as indicated by the substantial sum of products differences that Des had showed earlier and

we'll get into that detail. Overall, in conclusion, the deficiencies in stock identification and sampling made this stock assessment very difficult to validate.

Reviewing the fishery independent surveys, the survey information is noisy and difficult to interpret, but there are some consistent long-term trends, especially in the young of year indices, among almost all the surveys.

Spatial analysis of the fishery and survey data is needed to determine what portions of the resource each of the sources of data represents. The Technical Committee and Panel felt that the NMFS Fall Inshore Survey had the broadest geographic coverage of the available surveys. It may be used to monitor long-term trends of relative abundance and track some cohorts well, despite the inter-annual variation.

Just summarizing all of the recruitment indices, the overall average, which is the dotted blue line in the top panel, shows an increasing trend, but that averages out specific indices, some of which show declining trends, such as the VIMS Survey, and others show increasing trends.

Particularly the Connecticut, New Jersey, and North Carolina Surveys suggest a strong increase in recruitment and that contrasts very strongly the results in the virtual population analysis that just use the recreational CPUE index to tune the VPA.

Moving on to fishery dependent indices, there were two sources of information provided by the Technical Committee. The first was commercial catch rate series from the North Carolina estuarine gear and ocean winter fishery gear. This series was affected by regulations in 1994 and only covers a small portion of the weakfish range.

Recreational catch rates were from Mid-Atlantic private boats targeting a complex of finfish: bass, bluefish, croaker, fluke, weakfish, and spot. The Technical Committee felt that this series was less affected by regulations.

The problem that the Review Panel found is that the fleet historically accounted for only a small component of the total catch, less than 15 percent in the late 1980s and early 1990s, but now accounts for more than 50 percent of the catch and the main problem is this Mid-Atlantic private boat recreational CPUE doesn't account for trends in abundance outside the Mid-Atlantic area.

The third term of reference was to review the natural

mortality to determine if it's constant or increasing. The age structure indicates extraordinarily high mortality estimates as it is sampled. As Des pointed out, there are few older fish in the catch at age, but there are some additional reasons that total mortality could be inflated from these data besides natural mortality.

One is that the older ages are less available to the fishery. Many Mid-Atlantic resources seasonally migrate northward. There's a general tendency that older fish move further north. If those northern fisheries are not sampled, then we're excluding some older fish in the catch from our samples and so our sample age structure may actually be more truncated than the actual age structure.

Getting at the question of is total mortality increasing, the results from the Technical Committee are based on the ADAPT Run Number 20, which indicates increasing mortality. However, when survey indices are used to calibrate the VPA, they indicate that mortality is decreasing.

This particular run of ADAPT is tuned with recreational CPUE from Mid-Atlantic private boats and all of the subsequent analyses by the Technical Committee are based on this one ADAPT run. Investigations of increasing natural mortality are conditional on the accuracy of this ADAPT 20 run. The panel found that the results from ADAPT 20 and all the subsequent analyses that were based on these results were not reliable.

Is natural mortality increasing? The inference of an increase in natural mortality is based on this Mid-Atlantic private boat fishing effort. That effort is scaled up to the ADAPT estimates of fishing mortality during a time period 1987 to 1991 and those ADAPT mortality estimates are conditional on natural mortality being 0.25.

What the panel is concerned about is that the short period may reflect atypical catchability. That's when the Mid-Atlantic recreational fleet was less than 15 percent of the total fishery and now has greater than 50 percent of the total fishery. We're afraid that changes in catchability of that series may affect this entire analysis of trying to detect an increase in natural mortality.

Finally, the changes in natural mortality were calculated as the difference between the ADAPT 20 fishing mortality estimates and the total mortality calculations that are based on the recreational CPUE, but essentially that difference is a model residual and

that model residual represents all sources of disagreement between the catch at age and the recreational CPUE.

As we've seen from other assessments, there are things like changing catchability, underestimated catch, and sampling problems with the catch at age that can all produce residual patterns like this that can't necessarily be interpreted as increases in natural mortality.

We were also asked to evaluate the increase in natural mortality presumably caused by predation. The panel felt that there was weak evidence of substantial predation by bass on exploitable sized weakfish.

The way the model was structured is that the recreational catch rate was used as an index of abundance and implicit in that, the biomass that's being modeled is the exploitable biomass, roughly twenty-five centimeter, ten inches, and greater.

The panel did not see strong evidence for striped bass predation on large weakfish. There was some evidence provided on predation of small weakfish, but we felt that the evidence was weaker for these larger sized weakfish.

The predation model itself was inappropriate for the interactions among bass, weakfish, and menhaden that were being discussed in the Technical Committee Report, again because it assumes that the predation occurs only on weakfish that are fully vulnerable to the fishing gear and it ignores predation on smaller fish.

The panel felt that a better approach would be to form a more explicit hypothesis, for example predation on age zero weakfish, and if that's the case, it may be possible to model predation in a stock recruit function. If competition with striped bass is the factor that's affecting weakfish production, it would be more appropriate to have a competition model rather than a predation model.

The bottom line is even if the hypotheses have evidence for them and we have data for it, we need a longer time series of relative stock size and catch information to model that. Going back to previous peer reviews of this stock assessment, there are inconsistencies in the input data and so we're trying to do more in the way of estimating things like predation with less data. We just don't have the data here, the panel felt, to do a multispecies biomass dynamics model.

One of the discussions that occurred at the panel meeting was the risk of being wrong and we phrased it as a few what-if scenarios. If natural mortality has indeed increased over time, our estimate of F_{MSY} will be greater than our current estimate of F_{MSY} that assumes a constant natural mortality.

If the natural mortality is truly increasing, but we assume that it's constant, we would advise for a future fishing mortality that's less than the true F_{MSY} . If the opposite is true and M is truly constant, but we assume it's increasing, we would recommend for future fishing mortalities that exceed the true F_{MSY} . Summarizing that, is that assuming constant M is more risk averse than an increase in M .

Our fourth term of reference was to evaluate the stock status and its uncertainty. The panel sincerely appreciated the work that the Technical Committee did to think outside the box and to not just apply the conventional stock assessment models to these data and to try some creative solutions to these data problems.

However, the data weren't adequate to test the hypotheses that were being posed. The panel doesn't support any of the age-based analyses, because of the problems with the reliability of the catch at age and specifically the poorly sampled catch and the noisy survey indices.

In lieu of a quantitative analytical assessment, the panel proposes a descriptive assessment. Based on all of the equivocal in the survey indices and sampling the catch, the panel is uncertain of the direction of mortality. The landings have decreased since the 1990s, but the estimated discards have increased.

All indices of stock size indicate a positive response to the regulations during the early and mid-1990s. Since 1994, abundance indices are a mixed bag. Some show an increase, some show no trend, and others show a decrease. Despite the uncertainty in productivity, there's no apparent decrease in recruitment, indications of recent increase of recruitment over the last fifteen years.

Our fifth term of reference was to evaluate the biological reference points. The panel felt that the reference points from the biomass dynamics models weren't well estimated and the bottom line is in lieu of an analytical stock assessment, any conventional reference points aren't relevant. We have no estimates of fishing mortality or stock size to

compare them to.

We feel that the management needs to be adaptive to see if there's a strong response in the stock and I'll get into that a little bit more when we talk about the advisory report. The projections presented to the panel were based on the hypothesis of increased natural mortality. The panel felt these were not a reliable basis for management and, again, in lieu of an analytical model, projections were not available.

Our final term of reference was to forward some research recommendations and we have these categorized into catch, aging, fishery independent surveys, and modeling. Here we're reiterating a lot of the previous research recommendations from previous peer reviews, that the age composition of the commercial catch should be sampled throughout its range.

If there are portions of catch happening in northern waters, then those need to be sampled to see if those are older fish, as hypothesized. We need more observer coverage to estimate the discards, because discarding appears to be one of the management concerns.

Partitioning the catch and catch samples into geographic areas may illustrate where there's such disagreement in some of the indices. It may be that given the stock structure of weakfish, where each estuary may have its own self-sustaining stock, it may be that there are different things going on north and south and that may explain some of the inconsistency in the data.

There's a motherhood and apple pie recommendation here that a substantial investment in monitoring assessment is needed and some of these problems in inconsistent survey data, problems in sampling the recreational catch and the commercial catch, exist for a lot of species in the ASMFC management umbrella.

We propose that these types of situations, where it's difficult to make a stock status determination, will continue until an investment is made.

We need statistically efficient measurements of catch. We need to develop estimates of discard rates in the commercial fishery. There needs to be information on fishing effort. It was one of the pieces of information that was lacking in the assessment that could shed some light on some patterns. What are the number of fishing vessels, fishing effort in days, a bycatch by gear? All of these could help our estimation of the catch and interpreting trends in the

catch.

There are problems in aging, as discussed. Further research should be conducted on growth, as recommended by SARC 40. We need to improve the original growth estimates, including studies of density-dependent growth, and a detailed analysis of constructing the age/length key and the resulting catch at age needs to be reevaluated.

As far as the stock size indices, we need to develop analytical methods and more reliable datasets. A comprehensive monitoring program coastwide is needed for this stock and probably others, where we don't have state-by-state signals and instead we have a coastwide signal that we can interpret more clearly.

We need to evaluate the selectivity of gears to improve the estimates of mortality. Tagging studies may be used to detect changes in mortality rates. Young of year surveys are something that need to be analyzed on a coastwide basis in a more detailed way.

Coastwide catch rate series, both of the recreational and the commercial fisheries, are needed, again, to help our interpretations. The effect of annual variation on distribution and catchability is needed to try to reconcile the differences in different surveys.

We need to examine the assemblage of species in a historical construct and, again, this is getting back to perhaps some of the other management plans, fisheries, and species in the ASMFC umbrella, is to try to have a more coordinated effort to sampling these and modeling these.

As far as growth, analysis of factors affecting somatic growth should be carried out using data from research surveys. There was information from the fishery on growth rates, but the panel felt that those should be complemented with data from research surveys.

That was the panel's review of the research recommendations and now moving on to the advisory report and the stock status, the catch has decreased since the early 1990s. All indices of stock size indicated a positive response to the regulations in Amendment 3 to the plan.

Since 1994, survey indices are equivocal, with some increasing and some showing no trend and some decreasing, and trends in mortality are uncertain. This is not a desirable situation. We would like to have a more reliable determination of stock status.

However, with these data, we did not feel that that determination was possible.

In lieu of an analytical assessment and a determination of stock status, the panel advises that despite the uncertainty of recent indices of stock size, it appears that current regulations should be continued or strengthened to decrease the discarded catch until a strong indication of population response, either decline or recovery, is seen.

With that, I would just to acknowledge the people on the Technical Committee and the Stock Assessment Subcommittee for their hard work. Des, Jim, and Vic all gave excellent presentations to the Review Panel. We also had attendance of other members of the technical committees and also ASMFC staff, particularly Pat, were great in supporting our work throughout this. Thank you, Mr. Chairman.

CHAIRMAN DANIEL: Thank you, Dr. Cadrin. Questions?

MR. O'REILLY: I think I have a Part A and B and they're different in scope, but, Steve, you have participated in both what I would call an interactive stock assessment review and this recent format of a consensus review and by interactive, I mean that the old SARC process, and specifically for SARC 30 for weakfish, it was a system, from my understanding, because I have been up to the SARC previously, but my understanding is that there is a presentation and the group presenting the information, whether it be a technical committee or combined individuals, is advised of faults and maybe other ways they can look at the data and have some time to work on that.

In fact, in SARC 30 I know that happened and it started on Monday and was over on Thursday, if I recall, and there was a lot of work that went on to get it to the point where it passed SARC review.

The SEDAR, which was held for Atlantic croaker recently and for other species, was less intensive, but still interactive in that there were recommendations that came back from the SEDAR panel of about a half-a-dozen things about that assessment that needed to be addressed and I think probably four were able to be addressed and the SEDAR Committee was at least satisfied with why two couldn't be for Atlantic croaker.

I'm wondering, since you've been both in that type of a process and the current review process, do you think there's anything else that is missing from the

consensus review? Would there be any other information that you can recall that really give a more positive viewpoint on the assessment, but more importantly, I think in your presentation when you began you indicated that Run Number 20 was it.

The committee brought forth Run Number 20 and that was their ADAPT run and I'm inferring that it's a possibility that there could have been some work that might have been done around Run Number 20, with other runs. I don't know, but I would like your viewpoints on that and that's Part A. If I can delay Part B, which involves a couple of figures in the text, Mr. Chairman, that would be good.

DR. CADRIN: Thanks, Rob. That's a good question. I have been in both the interactive peer review and this consensus peer review. I've also been on both ends of it. I've been sitting in Des's seat and in the review panel seat and so there are relative merits to the two different systems.

In answer to your question, are there things that we could have done in the iterative process in which we would perhaps reevaluate a best run and table a better run than ADAPT 20, I don't think so.

I'll only echo what the previous peer review said, is that the problem with weakfish stock assessment is not in the models. It's in the consistency of the data and to the Technical Committee's credit, they did table a lot of alternative assessments. There was an ADAPT run with surveys and it had clear retrospective problems.

Most of our concerns are in the interpretation and use of the input data. The catch at age, there are some concerns about it and we almost need to go back to rebuilding the catch at age and re-expanding the samples out so that we don't have the sum of products check problem that we have.

With the survey indices, it really is going to go back to some life history of weakfish and how do we interpret each state survey, each commercial or recreational catch rate series and what are they good for and what are they not so good for. My answer would be no, I don't think we could have come up with a better assessment.

MR. O'REILLY: In the stock assessment document, there were two figures, 32 and 33 I believe. It's page 129 and 130 in the stock assessment document and you don't necessarily have to look at these anyone, but when I read the peer review, or the review of the assessment, I saw, from

my part, a little bit of a dichotomy, in that there has been talk about different stocks of weakfish that go back quite a ways into the past, obviously to Nesbit's tagging study.

I think Shepherd and Grimes had a three-stock hypothesis built on meristics. There were two-stock hypotheses and Simon Thorrold in the most recently, which your review committee looked at, looked at the homing behavior of weakfish.

Of course, I would contend that they were looking at age zero to age two and there are more ages of weakfish to look for if that type of method shows promise, which it does, but if there are different stocks, then I'm not certain that there's a good sign from the recruitment.

If there are different stocks, you wouldn't want to take the grand mean and you wouldn't want to homogenize Connecticut with North Carolina and VIMS, New Jersey, everything else. You probably would have to pay attention to discreet signals coming out of the Virginia survey, the North Carolina survey.

There's still a little bit of optimism there, but it's not as much as the review indicated, if there are different stocks. I think that's a charge that probably has been around for a while, to do more work on the stock discrimination.

Figure 33, I'm wondering if this was talked about much at the review. Figure 33 shows the trends in age zero and age one weakfish and you can see that about 1995 there's a great departure between the strength of the zeros and the strength of the ones and they continue just to tail off.

I think the Technical Committee has termed this the bottleneck effect, in that one year, if you do this cross year, one year to the next, you have a strong year of zeros. If you look to the ones, they're not there. I think Des has already shown that following Amendment 2 and the changes in size limits you wouldn't expect this to be a fishing related situation. I was wondering whether the panel did look at that question of the bottleneck.

DR. CADRIN: Yes, that was considered and that was actually tabled by the Technical Committee, is that one of the mechanisms of striped bass affecting weakfish was in predation of juveniles, age zero weakfish, which may be an interesting mechanism to follow up on.

Unfortunately, the Steele-Henderson model that was developed tracked the biomass of older weakfish and ignored this possible mechanism of predation by bass on weakfish age zero and just to follow up on your other point about stock structure, we discussed that early in the panel discussions, midway through, and at the end as well and it pervaded all of our discussions.

Mixed stock fisheries are difficult to evaluate, but at least recognizing that the data you're working on are from potentially mixed stocks could lead you to make different decisions about using data.

For example, disagreement among recruitment series may be entirely valid if you have different stocks contributing to the coastwide weakfish resource. I think of the summer flounder assessments, the winter flounder assessments, where that is recognized and that disagreements in survey indices and even catch at age, regional catch at age, is accepted as reflections of the truth. Rather than reject a survey because it has disagreement, you may make a different decision if you recognize a stock structure.

MR. PRESTON PATE: Steve, thanks for that very clear, meaningful presentation. You made a couple of what-if statements in the course of that that I would like some clarification on, because I didn't understand exactly what you were saying. They were relative to how M , accelerating or constant, affects F_{MSY} . Can you go back and explain those again, please?

DR. CADRIN: F_{MSY} , the reference point that's being posed for weakfish and other stocks, is a function of natural mortality. The greater the natural mortality, the higher the value of F_{MSY} estimate and essentially a lot of fish are dying from natural causes and so there is some optimization to fishing them a bit harder before they die of natural causes, as opposed to low natural mortality, in which they will survive if you don't fish them and so your reference point would be somewhat lower.

If you have a high M , you have a high F_{MSY} . If you have a low M , you have a low F_{MSY} . Moving forward to the what-if scenarios, it's kind of what if you're right in this situation and what if you're wrong. If you're wrong, you could be wrong in two different ways.

You can assume that natural mortality is constantly low and if natural mortality actually is increasing, you're going to be underestimating your F_{MSY} . You're not going to be allowing as much catch, but

you won't be overfishing.

If the opposite is true and we assume that natural mortality is increasing, based on some of the inferences we have, when it's actually constant, then we're going to be overfishing. We're going to be allowing too much fishing mortality than the stock can sustain. That's where we came up with that conclusion, that it's actually more risk averse to assume that the natural mortality is constant. Did that make more sense?

MR. ROY MILLER: I too am appreciative of the concise and clear analysis presented on behalf of the distinguished panel of reviewers. Dr. Cadrin, I wanted to explore a little bit something you said concerning the reliability of the Mid-Atlantic Recreational Index as an indicator of stock abundance.

Basically, you implied that if fish stocks have shifted to the north and the south, it could explain why the North Atlantic Recreational Index has declined and provides a conflicting signal with some of the fishery independent indices that you discussed.

What evidence do you have that the stocks have in fact shifted either north or south? If you would let me just add, I would like to talk a little bit about the Delaware Bay stock, which historically was the epicenter of the weakfish population.

The State of Delaware long-term trends in their trawl surveys, of which there are two, and you probably were presented some of that information, a juvenile trawl survey and a larger thirty-foot trawl survey that samples one-plus weakfish.

The juvenile survey has indicated no clear trend in juvenile abundance since 1980. There have been some ups and downs, but no drastic trends in that survey, whereas the large trawl survey, as indicated, in recent years has declined in overall weakfish stock abundance.

What I can't understand is that our recreational catch and effort clearly shows that the Delaware Bay population has disappeared almost to the point where they're an afterthought, where once it was the most abundant component, perhaps, of the weakfish stock.

In the 1980s when I was associated with the sportfishing tournament, we used to write over a thousand citations a year for weakfish in excess of eleven pounds. In the past fifteen years, the number of citations we write has dropped to less than twenty-

five and we lowered the minimum weight to nine pounds.

Clearly, there's been a vast shift in the relative abundance of large weakfish, older weakfish. They're not in the Delaware Bay area and so my question is where are they? If the recreational catch per effort in the Mid-Atlantic is not tracking this size, where are these fish and what evidence do you have that they're elsewhere?

DR. CADRIN: I guess I heard two questions and one is our statement of reliability on the recreational catch rates in the Mid-Atlantic. Using that series as an indicator of coastwide abundance has the problem that it would be susceptible to changes in distribution, as you mentioned.

If there is resource outside of that area, it won't be tracking abundance and we don't have direct evidence that that's happened, but what we have is the contribution of that fishery to the coastwide landings.

Historically, that fishery accounted for less than 15 percent of the total catch, whereas recently it's more than half of the total catch, which indicates that historically there was a substantial amount of fishing happening outside that area and now that's the only show in town, which is a smoking gun that this series shouldn't be used as it's being used, especially when we have coastwide survey indices from all parts of the range that show different trends. That was our concern.

Moving on to the trends in Delaware Bay, the review panel does not conclude that the weakfish stock is fine, that there's a large biomass of weakfish. What we've concluded is that a stock status determination is not possible with these data and by that, I mean a coastwide status determination of the weakfish resource.

I don't doubt that weakfish are not as abundant in Delaware Bay as they used to be, but we can't take that data and extrapolate it to the whole coast and that's a microcosm of the problem with weakfish, that we have local data and some of the local data are positive.

The North Carolina catch rates are increased or at least stable. Some surveys have increased. Other recreational catch rates or state surveys have decreased. With that mixed signal, we don't have a way to sort it all out now and that's exactly what

we're recommending, is a more detailed analysis by area and perhaps by stock on what are the dynamics of this resource so that we consider things like local depletions, yet in another area stable abundances. I tried not to dance around that, but I'm not sure I answered your question either. Did that answer your question?

MR. MILLER: May I follow? Thank you for that thorough response. I had just one comment. You mentioned that historical recreational catches comprised 14 percent of the total harvest, if I characterized you correctly, and that recently it's more like 50 or 55 percent.

Could that be also because historically total landings for this resource were dominated by trawl catches? A lot of that trawl catch, and I believe Louis would agree, came from North Carolina and those landings too have fallen off in recent years, thus increasing the relative importance of the recreational component of the catch.

It would explain that shift from 14 percent to 55 percent, in my way of thinking. As for your research suggestions, I certainly can't disagree with any of the suggestions that you made. I think they're appropriate.

What will be difficult for this board to wrestle with is which ones should we pursue and how important are they and how on Earth would we fund them, when we seem to be fully expended just keeping up with the striped bass research demands and fluke and other species as well.

CHAIRMAN DANIEL: I'm going to ask a couple of questions, just for clarification purposes, because I think what we all want to do is figure out where the real problems lie here and how we resolve it so that we get an assessment that we feel comfortable making management recommendations on.

One of the key recommendations in the 40th SAW when we sent the assessment to the SAW and asked for their recommendations on how to proceed, they recommended that it was essential that the cause of these inconsistencies and these differing signals amongst these various indexes and different catch at age models and such first be identified in order that an appropriate assessment might be undertaken.

I guess from the discussions from the Peer Review and the discussions from the assessment group, I guess I would ask has that been done satisfactorily

and if it has been done, as the 40th SAW recommended, did it have the anticipated effect from Norm Hall's recommendation that it would improve our ability to assess this population?

DR. CADRIN: I assume that question was to me?

CHAIRMAN DANIEL: To you and to Des. I guess it would be for you first and then to Des.

DR. CADRIN: Reading the past peer review, the emphasis there was sorting out the mixed signals in the data and to have a coastwide analysis, a spatial and temporal analysis as weakfish are moving seasonally, which surveys are indicating them at what times of year.

In my view and the panel's view, that was not done. In fact, there was emphasis towards using separate surveys rather than coastwide catch rates and a coastwide weighted survey index, which was suggested by Norm Hall. The Technical Committee went in another direction, which was to choose the single index of abundance which was most reliable.

CHAIRMAN DANIEL: Any response, Des?

DR. KAHN: We've done a fair amount of analysis on the surveys since the 40th SARC made that recommendation. We did the cohort catch curve analysis and we've done some things partitioning out the exploitable biomass from those surveys.

We had also done a lot of analysis prior to that on the length frequency distributions of those surveys, which through time, which was very illuminating. You can do infinite analyses on these surveys and you may or may not wind up with something that is useful.

It's quite possible that we could do intensive analysis on say the NMFS survey and never come up with a useful index. Some surveys are not good for some species and in the case of the NMFS survey, it just -- It's right at the time of the migration and it doesn't seem to be a reliable index. It's extremely variable and so whether you could reduce some of that by analysis -- It's possible, but it's not a sure thing by any means.

CHAIRMAN DANIEL: I guess it's important for the board to just kind of reflect a little bit in history and think about the previous assessments that have been done and the previous

reviews that have been done and the previous emphasis that was placed on the NMFS Inshore Fall Survey in the mid-1990s and now that whole thing has changed on us.

We are dealing here with a lot of inconsistencies and interpretation of the various data sources that we have to manage this population and so we've found ourselves in sort of a quandary here, where we do have various recommendations that are forthcoming from both the Peer Review Panel and the Stock Assessment Committee.

The other point that I was made aware of earlier today, around lunchtime, was it's interesting in the review of the assessment we were looking at the age data and some of the folks on the Technical Committee, myself included, because I was involved in the work at the time -- Most of you all recall all the work we did on the scale and otolith comparison work and trying to convert scale ages to otolith ages and the Lowerre-Barbieri study that looked at the weakfish age structure.

Unfortunately, that information was not available to the peer reviewers and so I think one of the concerns is that everybody wasn't working with a full deck in terms of the review and perhaps even -- I didn't mean it that way. Everybody is raising their hands now.

I think we have real concerns, but I do think it's important that we continue to review back and look at these previous SAW-SARCs and look at the recommendations that have been made to us in the past and how we've followed those recommendations as we've moved forward.

MR. GIBSON: I think we're being bedeviled here by a substructure and I don't know if I want to call it multiple stocks, but this coastwide stock assumption is killing us and it has been for some time. It pops up in some of the raw sampling data or the aging data and you can recall when we would have samples of fish in which a group of twelve-inch fish would age out at two years old and another group would age out at five years old.

It wasn't a matter of a single year overlap or a discrepancy. We have surveys in New England or catch monitoring that will see relatively large quantities of fish that are six to eight pounds in one year and then they're not there the next year. I seriously doubt if they got eaten by striped bass. I'm just not buying into that.

I'm sure the little ones can be consumed, but I don't

think that's happening. The following year, we will have twelve-inch fish in Narragansett Bay instead, but every year we have eggs being produced in Narragansett Bay and being monitored by the power companies at the time the young of the year are produced.

I think there's an underlying sub-stock structure here that's complex and may be of varying migration tendencies that's bedeviling our ability to do this assessment and to me, that's one of the highest priorities for research, I think, to follow up on stock structure.

CHAIRMAN DANIEL: Excellent point. Any more questions to the Peer Review?

MR. POPE: Very quickly on discards. I noticed that they were mentioned a number of times and I'm just curious as to where is the bulk happening, what type are they, and what more do you need to know on the discards, because you mentioned it a few times.

DR. CADRIN: I wish I could answer that well. Really, all we had were estimates of total catch and estimates of landings and the Review Panel took the difference as the discards, but that's something that I think managers are going to want to look at, is what fisheries are discarding where and when, so that you can mitigate that, but I don't have that information.

CHAIRMAN DANIEL: That's a big question and I would like for Des to also address that.

DR. KAHN: That statement Steve made was actually not correct. We had a table in there of commercial discards by year and age, going back to 1973. If he and the Review Panel missed that, that will be another of the many things in the assessment which they missed.

There are a number of erroneous statements in this peer review and to be fair to them, this was a confusing set of data and it was a very complex assessment report. Apparently, they had a number of misunderstandings, because just to touch on the NMFS survey, which we just discussed, there's a statement in there that we agreed with them that the NMFS survey is a good way to follow cohorts and that's not correct.

They had a number of misunderstandings and the discards, we estimated from commercial trawl and gillnet fisheries, based on the NMFS observer

database, coastwide as far as the NMFS observer data covered, which certainly is not a totally thorough coverage, but we had that estimate. The recreational discards are the only ones where we subtract the harvest from the total catch estimate.

CHAIRMAN DANIEL: Tom, is your question a technical question? Quickly, please. I'm not going to take a lot of questions from the audience to the --

MR. TOM FOTE: Tom Fote, Jersey Coast Anglers Association. One of the things you talked about is the competitive model and what we have seen, just to answer the question, is croakers have basically expanded their population coming up the coast.

We watched when the croakers started moving into Delaware Bay and the weakfish stopped showing up and they wandered up in Barnegat Bay. When the croakers moved further up to Little Lake Harbor, they started moving to Barnegat Bay and the last two years, since there's been a lot of croakers, we see an early run of big weakfish and we see some later on in the summer, but for those croakers, they seem to be displacing the weakfish.

Last year, of course, we got this huge catch up in Raritan Bay and I don't believe it's 1.1 million fish recreationally in New Jersey, but we see that and is there a source maybe of competitive? We've gone from a commercial fishery of 200,000 pounds to I think croakers is like twenty million pounds or something like that. Could that be a displacement of the weakfish and pushing them up and down the coast and moving them out?

We had a strange year this year where the people fishing for sea bass on wrecks off New Jersey in the winter were catching eight or nine-pound weakfish mixed in with the sea bass fishery and so it's a strange fishery.

I have just one other point. When Roy talked about the troll fishery and what was going on in the 1980s and the 1990s, that was also a fishery on six-inch fish and seven-inch fish that went to a pan fishery. When we raised the size limit, that's when the troll fishery stopped. It wasn't because of lack of fish, but we basically eliminated the market for the troll fishery, because they basically really harvested, especially the Cape May fishery, small fish, which they sold as pan fish down in North Carolina. Thank you very much for the time.

CHAIRMAN DANIEL: Thank you, Tom. Any other questions for Steve, technical questions on the assessment? If not, thank you both.

MR. PAT AUGUSTINE: Thank you, Mr. Chairman. I thought about it. It was mentioned several times that there seems to be -- The surveys go on during the time when the weakfish are moving out. Both of you mentioned it. Des, I think you mentioned it and I know Steve mentioned it.

Neither one of you made a recommendation though that we should talk with the NMFS people to see if there could be either a side-by-side or coverage at a different period of time to fill that gap, because from what we got out of it today, I'm more confused now than I ever was.

When I looked at what we're going to try to do in terms of further managing this fishery, based on the information we have, I'm walking away with one thing -- The fish are in decline. How much, I'm not sure. Again, Mark Gibson mentioned in his point that maybe it is multiple stocks, but when we leave here, we better have more answers to what we're going to decide on or whether we're going to delay the action on this amendment.

DR. KAHN: In response to your question, I think it's important for the board to understand that reading this review, the Review Panel is not convinced that the stock is in decline. We are. That's a big difference here.

CHAIRMAN DANIEL: Any other questions regarding the Peer Review? If not, what I would like to do is move on into the revisiting the Draft Addendum I, but I would like to start by summarizing and providing you with some ideas to think about and to debate amongst the board.

We delayed implementation or moving forward on Addendum I waiting for a peer-reviewed assessment. We have the peer review and the peer review rejects our assessment. Consequently, they recommend that we maintain a status quo and we address the bycatch discard concerns.

The Technical Committee indicates that maybe there is some issues with the discards and we're not exactly sure where they are or where they're coming from. We also have a peer review that has raised concerns that have been concerns amongst the Technical Committee as long as I've been involved with it and that is a stock structure issue.

There does appear to be a lot of information that supports not a single stock and I, for one, am a strong proponent of the belief that there is a north and south of Hatteras component of this fishery.

In the absence of a peer reviewed stock assessment and in the face of a recommendation from a peer review panel to maintain the current management measures and address the bycatch concerns, one recommendation that I would have to this board would be that we ask the Technical Committee to review the literature and the information concerning the stock structure and try to come up with some type of a resolution to that question.

Secondly, identify for us where this bycatch is occurring and what fisheries does it occur in, when does it occur, where does it occur, and how might we reduce it if it indeed is at the level that is suggested in the peer reviewed report.

In the meantime, there needs to be some discussion at this board about how we move forward and get a completed peer reviewed stock assessment that we can base our next amendment or addendum on. The first thing I would like to do is, with that sort of in mind, we are going to need a motion to accept the peer review.

MR. ERIC SMITH: Mr. Chairman, I'm not prepared to offer that motion yet, but I would like to follow up on your introductory remark, because I think it would be helpful for the board right now to, as board members having heard both the assessment and the peer review -- I applaud both and I appreciate it. It's been very enlightening to listen to all of it.

I think the board needs to talk about where we go from here as well and I have several points that have been developing more or less since we got the assessment and then got the peer review and now have heard today. With your indulgence, I would like to go through those.

CHAIRMAN DANIEL: Please.

MR. SMITH: Point one is great reports on both sides and it just shows that sometimes science is equivocal in their different views of different people and I respect that and I'll have more to say on what we do about that in a minute, but I just applaud the efforts, because they're always enlightening.

This is the second time we've had a peer review that essentially recommends that we not use the assessment prepared by the staff that we assigned to

it and that tends to leave us stranded or paralyzed as managers and the only humor I will offer in my remarks here is that one way of doing this is we could be imperial about it and off with their heads and find me some new scientists.

I'm not directing that at either group, by the way, but just that's one way of doing it, but I don't think that would be a very effective way of doing it. By the way, I was speaking figuratively and not literally.

My view is the assessment biologists feel that there are some deficiencies in the review that are worth further consideration and that's not being critical. I don't see it as being critical. I see it as a healthy step beyond what we heard from the peer review.

I think as a board we need to decide whether we want them to pursue and provide us feedback on those things. In fact, it would be very helpful to get the slides. The slides were much more enlightening, frankly, than the report and that, again, is not a criticism.

I enjoyed the enlightenment I got out of the slides and I don't know if those have been made available, but they could be the basis of trying to answer some of these unresolved questions or we could just stand pat on the review, the motion to accept the peer review, and be done with it, which, again, leaves us paralyzed, or whether we want to accept the assessment that the stock assessment produced for management purposes and basically say thank you to the peer reviewers, but we've decided to go the other way.

Those are three different things we could do. However, it's been pointed out to me that the charter and the peer review process that we've accepted in the past suggests that we're really not supposed to use the assessment unless the peer review has said it's okay to be used.

I do find it difficult though to accept that process and I may have more to say about that at our Policy Board meeting. It may be that we need to rethink our process as to whether the board is left only with you can accept the peer review and take what it offers or whether the board has the right to say I've heard both sides and I kind of think I want to go that way instead of this way.

I've always been an advocate for the board having the right to make those kinds of choices, faced with uncertainty, but the process, at it sits right now, may not allow us to do that.

My final two points is a science view and a management view. I'm probably unqualified to offer the first one and I'm hired to do the second one, but I'm going to give you both. I think we ought to get the slides and give them to our stock assessment biologists and have them respond point-by-point.

There are going to be a lot of things they agree with and a lot of things they don't and I would like to know where the disagreements are and why and hope that we can find ourselves in a comfortable place in the future.

I clearly think Mark's ideas, and yours, Mr. Chairman, about the investigation of the possibility of separate stocks is worthwhile. That seems to be something that resonates with both groups. It may have been looked at more by our stock assessment people than we think, but we need to ask that question and get that answered.

On management, I guess if I understood Steve's presentation, status quo regulations and perhaps look more critically at regulations that might deal with the discards and the dilemma is we don't know where they are or how big they are and we need that answer before we can design a regulation.

I took it a little more conservatively and maybe I'll regret saying this, but I kind of did my own evaluation of if M is high, what do you do if M is low, what you do -- The way I saw it is if M is high and abundance is declining, we need to protect some fish and hope for the best and if F is high, we need to protect some fish.

Either way, as managers I think we need to look at how much of the stock that's available to be fished for needs to be conserved in the face of this kind of scientific uncertainty and my view is we need to protect some fish and I'm not quite certain how many and so I don't know if I would advocate for status quo, but my view would be that we should look critically at the addendum and decide, in the face of this kind of science, whether there's something we should do anyway, in spite of the difference in the scientific advice we're getting.

MR. GORDON COLVIN: I too want to commend both the Technical Committee, the Stock Assessment Subcommittee, and the Peer Reviewers for the work that they've shared with us and I understand and appreciate, having been through this process as board chair some time ago, how difficult it's been in that we always seem to be looking at a

moving target with weakfish, perhaps more so than many of our other management species.

It's been a real struggle for us to feel comfortable about our management decisions, in light of where we are, think we are, or aren't sure where we are with the status of the stock and the fishery.

If I understand your advice, Mr. Chairman, preliminarily, let me see if I can reiterate it in my own words, because it sounded like it made a lot of sense to me and I wanted to add one other suggestion, if I could, that we perhaps task the Technical Committee to examine carefully the various conclusions and remarks that have been made in this review regarding the implications of the stock structure situation and to address some recommendations that bear on that back to the board that may well also address the adaptive management comments of the Peer Review Report.

Secondly, that we undertake a thorough review, and that may have been done, but to compile information that exists with respect to what we currently know about discards and to similarly present a condensed assessment of that to the board, such that the board can contemplate whether that information itself also suggests the prospect for some decision making of an adaptive nature in a management approach on discards.

If that's your advice, Mr. Chairman, I think it's good advice and I'm prepared to support it. I don't know if we need a motion to do that, but I think it makes sense.

I would like to raise a third question for follow up as well and to see if I understood the remarks that you made and the interchange you had with Dr. Cadrin that it seems that there is some uncertainty on the record with respect to the extent to which we have specifically addressed and followed up on all of the issues that were recommended by the panel at the SARC panel at SAW 40 and that the implications of what might -- If some of those recommendations remain unaddressed to this date, the implications of how addressing them might have affected or might affect a review of where we are.

If I understand it correctly, there are some unaddressed recommendations still or there's some uncertainty about that and I, for one, would like a very clear, unequivocal synopsis of that presented to me as a board member in writing that we can respond and react to.

I don't think it should happen here today, but I do think it ought to happen and if there is some further work that ought to be done, then let's get it done. Unless I misunderstood you, Mr. Chairman, I think that's what I was hearing and I sure would be willing to be told that I missed the point, but I'm not sure that I did.

CHAIRMAN DANIEL: I don't think you did. I think it would be an additional charge then, Gordon, to ask the Technical Committee to, and let me summarize your summary, that we examine the conclusions and remarks of the reviewers, that we examine and compile the existing information and get some advice from the Technical Committee on the stock structure issue, and then quantify and identify and characterize the discard issue and address the concerns of the various peer reviews that have occurred, primarily the 40th SAW recommendations, and how those recommendations were followed through on by the Technical Committee and if indeed they were.

My understanding, again, is that they weren't completely and that if they had been completely that that could have had an impact on the subsequent stock assessment. That's my understanding.

MR. UPHOFF: I just want to go back to after we came back from the 40th SARC in February of 2005 when I reported to the board the results and I'm looking at the slide right here. The 40th SARC concluded that substantial data review was needed and that the shortcomings could not be overcome with a better model.

We totally agreed with that. At that point, it was go back to the nuts and bolts of the assessment, which I estimated would take somewhere between one and three years, depending on how many meetings we had, or do we go forward as best we can with what we have at hand?

The board explicitly told me to go forward with what we have at hand. We have been able to address some of the things, but as far as disassembling the car all the way down to all its parts and putting it back together, we couldn't do that in a timely enough fashion for what was needed here and having been sent to the review a second time, it came as quite a surprise to me that we were going at that point.

I can't tell you exactly what wasn't done, but I will tell you explicitly that certain things weren't done because we could not give management advice in a timely fashion and retool the assessment totally,

down to the catch at age matrix, growth estimates, and so on.

These are the things that, again, got pointed out as deficiencies in this assessment. It's not really coming as a surprise. It's just on the schedule and on the manpower requirements and so on we had to make a choice and the choice actually was made with your direction, to proceed as best we could with what we had.

That's just kind of a point of clarification, because I am kind of bothered that we didn't do things, but we didn't do them knowing that we couldn't move forward and retool at the same time.

CHAIRMAN DANIEL: I guess where we are at this point is that we have to reflect on and identify all of the concerns and issues and unresolved problems that we currently have and I think all of us recognize the demands that are put on the technical committees, not only at the technical committee level, but at the state level where you work.

Everybody, I think, understands the problems that can arise there and if this was a more daunting task than was possible to complete in the time for the peer review, then I think the board understands that.

Notwithstanding that fact, we do have recommendations that were made by the Peer Review and we need to know what was accomplished and what wasn't accomplished and whatever wasn't accomplished are those critical components of the next update that have to be accomplished before we get a review.

Now we've gotten a formal rejection of the assessment from a peer review panel sponsored by the commission and so we've got to figure out how we're going to put together the next assessment so that it doesn't meet the same fate.

I don't think anybody is laying blame or pointing fingers anywhere, but certainly we can't just ignore this and say we didn't have time to address these major issues that were recommended by a peer review panel and we're just going to ignore them from here on. I don't think we can do that.

DR. JAMIE GEIGER: Mr. Chairman, I totally support your recommendations that you just mentioned. I think we need to move on. I think we've heard a lot. I think we've heard more than what we need to do.

I congratulate everybody for some excellent presentations and bringing clarity to this relatively confusing situation, but I think you have made very solid recommendations and suggest we adopt those recommendations and put a time certain date on getting those recommendations answered.

My last comment is I share Eric Smith's concern that status quo appears not to be a reasonable option. I think we have to take a more risk-averse and conservative approach with the management of this species.

DR. KAHN: Just one point about the separate stock approach. I have long been an advocate within the committee of pursuing that idea. However, there's a real problem. The Peer Review Report recommends that we take this to the extent of partitioning catch by stock. That's not possible.

For example, the North Carolina winter fishery, in fact any oceanic fishery, we cannot partition those landings by stock, just like we can't do it for striped bass, and that's why for striped bass we pull everything into at least a VPA and then we have the separate tagging programs in the different spawning stock areas, which is good, and we're pursuing that in Delaware. We're pursuing a tagging program, but you cannot conduct a full fledged assessment with the separate stocks because you cannot partition your catch that way. That's something to keep in mind, about there are limitations there, too.

CHAIRMAN DANIEL: I'm going to follow up on that, because in my discussions with Technical Committee members and peers as well, if we do have separate stocks here, and I think there's a lot of evidence to suggest that we do, then a single stock assessment is going to have problems and may be the reason why we're having such a difficult time interpreting some of the results from some of these various assessments.

I think we can move forward. I don't disagree with Eric's comments and I don't disagree with Jamie's comments. I think we do have to be cautious about this. Right now, however, we were tasked to come back and go ahead and take the addendum off the table and start working on that again.

It's just my belief that we've got to get some of these other questions answered and resolve some of these other problems before we move forward there, because right now we don't know what we would reduce from, what time frame, how we would reduce. I think there are a tremendous number of questions

that have to be resolved before we run headfirst into the addendum process.

MR. AUGUSTINE: There's no question all of your points have been heard by the board and we're ready to move forward, I think, with some of those ideas. I'm sure that the staff has been writing diligently and keeping in mind all the key points that you suggested we do and I think the consensus is around the table that we want you to move it now.

In addition to that, I think the key thing here is that let's focus on the major issue. The major issue is the difference in what the peer review stated and then Des and company have to look at that and come up objectively with what they believe is right and isn't right and I think that part, but let's separate all of that from the action we've got to take.

I agree with the gentleman over there, Mr. Smith, and Dr. Geiger. I think we've got to look at this addendum and both bodies said we have a problem and we're only kidding ourselves if we try to put this action off.

The thing that is bothersome about all this is we don't know where the bycatch mortality is coming from and until we know that, we just can't sit with our hands tied. Let's move forward with that and if we could start the discussion on that, it would be greatly appreciated. Thank you, Mr. Chairman.

MR. SMITH: I'm always offended when somebody refers to me as a gentleman. I never feel like I've said enough. That was Mark Twain sort of, but it's late in the day. I would just simply ask -- I can accept the guidance you give on the addendum. It's a thought I had, but I can understand your point of view and I have no qualms with that.

I would ask if the board would like to add a fourth point to the list that you and Gordon started to develop and Pat actually hit the nub of it and I had made the view before that it would be very helpful for me to get a report from our stock assessment group that responds essentially point-by-point to things in the peer review with which they disagree.

I don't want to have an armed conflict over this, but to the extent that there are things where they say that -- On reading their report, I can see that somewhere there was a point missed. Either we missed one and they caught it or they missed one and we need to explain that to the board.

I think that would be very helpful for us as well and I

would hope the rest of the board would include that in the list of the tasks to be done.

CHAIRMAN DANIEL: I guess for clarification, I think that was Gordon's first recommendation, was that we have asked the stock assessment committee to examine the conclusions and the remarks of the review, but if we can move forward -- Maybe we can clarify that by saying and have them respond to us with the points that they have in regard to the review.

MR. SMITH: The note I took on his comment, he was referring specifically to the stock structure issue and I'm referring to the response to the whole thing.

CHAIRMAN DANIEL: I think that's certainly an agreeable thing around the table, I would hope.

DR. KAHN: I really appreciate the opportunity that Eric has offered us to respond and I think we have a lot to say in response to this peer review and I would hope that we would get a chance to make that case to the board and, personally, I think the board should hold off on approving this peer review until they've heard our response. That's just my word on it.

DR. GEIGER: Mr. Chairman, I certainly would support that, but, again, I get the sense that we're entering into the old classic dueling banjos and to be honest with you, I think enough is enough.

I would like to have both entities, if possible, together. I would like to have some synergy in this effort rather than division and I would like to see reaching some common objectives and goals here. I think we've heard enough.

It's time to do some action and it's time to put these folks together and get the results and answers that I think have been discussed on this board with some very good, solid recommendations from you and other members of this board. I think it's time for a little bit of action.

MR. A.C. CARPENTER: I'm going to go and I guess we've moved into the next agenda item here, but a moment ago he was referred to as the gentleman on this side of the table and since I'm sitting between two very fine gentlemen, I do want to note that I'm going to differ in their interpretation of whether to move forward with the addendum or not.

I personally am uncomfortable with moving forward with the addendum at this point, given the uncertainty surrounding the status of the stock information that we have.

I would prefer to add one more thing to the list that you're charging your committee with and that is to give us a timeline of what they anticipate would be needed to answer the questions which were unanswered or delayed in their reflection so that when they come back at the next meeting if this is something that they can work on in a three-month period or a six-month period and I've heard three years, we need to know what we're dealing with there as well. I think we need a timeline for responses to the shortcomings that have been identified.

MR. PATE: I guess Jamie has sparked my interest in expressing my concern about the idea of coming back with a rebuttal to the peer review at a board meeting. I can't help but believe that that's going to be very unproductive for us.

I'm about to say something that I hope isn't interpreted as any discredit to people's technical skills sitting around this table, but I am not well versed in all the intricacies of a stock assessment. I suspect there are others in the room that share that level of competency with me.

I would not be comfortable being put in the place of listening to that technical debate at the board level and picking which one of them is right. That's what the peer review process is for and if there are recommendations that come out of that peer review process to improve the assessment, then the assessment needs to be taken back and improved.

If there are recommendations that come out of that peer review report that direct the board for improving its database and instituting programs that will give us a better understanding in the next assessment, then we need to go forward with instituting those programs, but please don't put me in the position of evaluating whether or not Steve is a better scientist or Des is a better scientist. I can't do that and it's not productive for the board.

MR. GIBSON: I feel a little bit more confident in those areas than Pres, but I have the same opinion nonetheless. I don't think it will be productive to have continued exchanges and point counterpoints at this point.

I think we ought to -- I am not averse to the process

that's been laid out about tasking the Technical Committee to review evidence on stock structure and I think that it's important to respond to those areas where the Peer Review has said it has not been addressed and get those addressed in the future, but I don't think we're going to get anywhere by going point counterpoint. We've been there and we've tried that and that doesn't work.

I'm also, just to move on, I'm not ready to drop this addendum either because we have inconsistent advice or diverging advice from the Peer Review Panel and the Assessment Committee. I take a differing view of this M versus F_{MSY} that the Peer Review Panel has laid out for us.

I think that works and it's true in the case of different species with different life histories where those that have short longevity have high sustainable fishing rates and those with longevity and low M have lower sustainable fishing rates. That's not what we're talking about here.

We're talking about a fish that may have, for some reason, incurred an increase in natural mortality. I may not agree that it's as high as what the committee has laid out, but if in fact that has happened, what F there is becomes very destructive on the population, because they're not evolutionary adapted to a high M mode and if M in fact has not changed and if you accept high total mortality, then you have high fishing mortality rates.

Either way it's a dangerous place, I think, for the resource to be and I think we need to move ahead with the addendum and possibly make some adjustments in terms of fishing mortality and discards.

MR. POPE: Just very quickly, I think it's getting to the point, in my mind, where we almost need to have some type of emergency action. I know coming from me that sounds pretty crazy, but it's to the point where we're going back and forth and back and forth and back and forth and now we see some type of decline where some people are not seeing any weakfish. I would like to see us really move along very quickly in whatever we decide that we're going to do.

MR. EVERETT PETRONIO, JR: I agree with Gil and I think I would like to see, if possible, and I know I'm one of the newcomers to the group, relatively speaking -- If the Technical Committee and the Peer Review Group are going to be communicating, I would rather see them come back

to us with recommendations that they can agree on that this board can take some action with.

I don't want to see them argue and I don't want to see them spend time and resources on something that's not going to -- I think there's a great sense of frustration around this table that we know there's a problem. I know we're certainly not seeing the weakfish that we should be seeing, I think.

I think there are several other states around the table who feel the same way and I want to explore what we can do relatively quickly meeting all of our procedures that will allow this board to do what we do, which is manage, instead of weigh in on which stock assessment and which review might be right. I would encourage while we are here the TC and the Peer Review to potentially tell us what they could do in that area so that we can get on the dime.

MR. COLVIN: Mr. Chairman, I think we should clear one agenda item before we plunge into the other. I personally find myself in support with the remarks that Chairman Pate made a few moments ago with respect to next steps.

Our process is our process and as Chairman of the Eel Board, I understand the dilemma that we face when we don't have an accepted assessment as the clear and unequivocal basis and adopted reference points for our next steps in management, but that's where we are and the process deposits us there.

We have some follow-ups to do. I think we've begun to define them pretty clearly and I think that they may in fact serve as the basis for some next steps in management and I appreciate the panel's recommendations and notions for some adaptive approaches and I think that's consistent with Mark Gibson's comments, which I, as usual, find enormously clarifying and helpful.

That said, I would like to suggest that we put the current review behind us, as we should and is consistent with our process. **I would like to move the board's acceptance of the terms of reference and advisory report to the Weakfish Stock Assessment Peer Review.**

CHAIRMAN DANIEL: Motion from Gordon and second by Mark Gibson to accept the peer review. Is there discussion?

MR. SMITH: I don't want to be confrontational here, but I have to say I cannot support this motion at this time, although I actually

do agree with Pres on about two-thirds of the points that he made and I'm going to quickly tell you what they are.

In my comments, I specifically -- Des, don't take this personally, please. In my comments, I clearly, specifically said no armed conflict and then regrettably, that's how Des sounded. I'm sorry, but it actually changed a recommendation that the body had tacitly agreed with into one that now people don't agree with.

I don't want a war over this and I don't want to have to decide on models, but I don't want to be inadvertently misinformed by a peer review either and that's what I wanted to get at, which was a managerially useful document that said this peer review was great effort in our review by the Stock Assessment Committee, this memo, if you will.

However, there were some things that they either misunderstood or they misapplied to what we had presented and it's enlightening, I would think, for the board to have that. Now, if we don't have that, the world won't come to the end.

Gordon is kind of right in the sense of let's get on with this, but if we get on with it simply by accepting the peer review, we're back to what I said in my first remark, which was we're paralyzed by the fact that we have a peer review, again, that rejected our assessment and we have no basis for management. Yet, Mark and Gordon both agree that we need to do some management.

I need, before I'm comfortable as a board member to decide on where we go, to get to a better place on the differences of opinion between two groups of qualified scientists and that's what I was trying to get at without people drawing swords.

The peer review, to me, leaves me unfulfilled at the stage it's at right now, but I think some further management action is warranted and so we dispense with the motion one way or another and we're probably going to then discuss what we do as managers.

MR. MILLER: I need some clarification from the maker and perhaps the seconder of the motion. If we were to vote to accept the terms of reference in the advisory report to this Weakfish Stock Assessment Peer Review, what does that imply?

Does that imply that the report is what it is and we

accept and we thank the Peer Review Committee for their efforts or does it imply that were they disagree with or contradict our Stock Assessment Subcommittee that we feel that this report carries some precedence over it? Can you clarify for me, Gordon, if you would, what your intention is by offering up this motion?

MR. COLVIN: I believe that the acceptance of the Peer Review Panel Report includes acceptance of the advisory report, which says what it says, and it leaves us with those conclusions with respect to current stock status and I'm just trying to respond to your question and I would like to respond to what Eric said too, but I'll wait to be recognized separately for that.

Again, that is our process. Our process -- I'll go back to my painful experience with American eels. We've had an assessment come forward that offered certain proposed conclusions and it was not accepted by the Peer Review. This is how the scientific process seems to work and it's difficult.

I hope that there is further professional dialogue between the parties, but at the end of the day the peer reviewers were not persuaded to adopt the conclusions and recommendations of the assessment that was presented to them and our acceptance of the Peer Review Report signals our acceptance of their conclusion in that regard.

That leaves us without a specific quantitative basis from the assessment for further management. That doesn't mean we don't have the basis for management, but that's my rebuttal to Eric that I'll come back to.

CHAIRMAN DANIEL: I think you can keep going.

MR. COLVIN: If we never had a stock assessment, we could still manage. We could manage by the utilization of our collective wisdom and judgment and our ability to cooperate and to try to come up with ways to manage our resources that meet our collective needs.

The fact that we may not know precisely where we stand with respect to a biomass estimate or a fishing mortality rate estimate that compares to an adopted reference point doesn't mean that we can't take some actions that are proactive and we've had some suggestions about taking some adaptive approaches and perhaps this is an innovative approach and that's why we've suggested that it would be helpful to get

some further review and advice in that regard.

I don't believe that just because we don't have an updated quantitative assessment of where we stand relative to reference points that management action is precluded, ever. That, I believe, is what we get paid for, including my colleagues here who don't get paid for it.

MR. HOWARD KING: If we adopt this motion and if we approve this, does that automatically put us into a status quo position by the board?

CHAIRMAN DANIEL: I believe that it endorses the assessment. It does not stop the recommendations that have been made around the table, that we get the response from the Technical Committee, that we examine the stock structure, clarify the discards, construct a timeline, and respond to the 40th SARC request for information. I don't think it changes anything. It simply formalizes the review from the Peer Review.

MR. POPE: I think what Roy was asking is the difference between accepting and adopting and I think that's what we're trying to get at here.

CHAIRMAN DANIEL: I would say accept is the appropriate language.

MR. O'REILLY: I can accept the peer review as a form of guidance and I've had the pleasure to work with Steve in the past and, of course, Des and Jim. I do think that there are certain parts of the stock assessment that have shown great improvement compared to the past and if you realize the importance of having a peer review -- I don't think you can diminish its importance.

It is a modern step forward. At the same time, this board worked with the Technical Committee from 1990 until about 1998 strictly without any peer review and if you look back to 1990 to 1994, it probably rivaled striped bass in the frequency of meetings and hair pulling and graying and everything else.

I certainly accept the advisory report. I see it as a form of guidance. However, my acceptance is also saying that what the stock assessment shows also has some promising information. I think there's been a recognition by Jim Uphoff that if there were more time you probably would have seen some more firepower.

DR. KAHN: I just wanted to respond briefly to some of the suggestions that -- We would certainly be glad to follow through and discuss the recommendations and so forth of the Peer Review. The only problem I see with this particular review is that when you look at the recommendations, there's no basis for an assessment, according to this review.

The only thing -- They talk about separate stocks, which is fine. It will only take you so far, in my view, and then they like the young of the year indices, it seems, but there's no suggestion for what assessment approach to pursue. As I read this, there's nothing we can do. That doesn't leave us with anything to follow up, based on this peer review.

MR. UPHOFF: I have just kind of one brief point for perhaps the real conflicting viewpoints about the information, whether it's acceptable or unacceptable. The management recommendations from this aren't really that far off, either status quo or do more.

I'll point out that prior to last October the Technical Committee was charged with making recommendations for cuts and measures and we did so and in reality, it's not really inconsistent with the endpoint where you're going to make some kind of management advice.

We made a recommendation for a 50 percent reduction in F. It may not be based on faultless information, but the recommendation is there and it is not inconsistent with the advice from the panel and it's a matter of maybe doing this and -- It's either holding steady or doing this and see what happens.

MR. AUGUSTINE: To that comment, Mr. Chairman. Jim, would you then still hold your recommendation at 50 percent after you've gone through this exercise with your review and what the peer review noted?

MR. UPHOFF: I would. It was a reluctant consensus, but it was pointed out by several people that the recommendation was made and I'm not sure if -- Knowing what we know, with all the flaws or that it's blown to pieces, you can still make the recommendation.

I have talked to most of the Technical Committee and they really haven't changed their minds about the -- We had five points of agreement that we started with and so on and the information gathering that I did, they still feel the same way.

MR. AUGUSTINE: I have a follow-up, Mr. Chairman. What we're saying is we agree and we don't want to be status quo, but in your mind and in the Technical Committee's mind, it could be as high as 50 percent and then again, with that, we could look at an Option 2 at 25 percent and gain part of that. What you're saying is we still have a range, but you would prefer 50.

CHAIRMAN DANIEL: We still have a range, but we're also talking about the motion on the board and so let's get back to that and dispense with that motion first and then we'll get into the addendum discussions about where we are?

MR. SMITH: Is that the correct motion? That looks to me to be a motion that if we were going to start a peer review we would accept the terms of reference for a peer review. Aren't we really saying we accept the peer review?

MR. COLVIN: I think I was just reading the title from the document when I read that. It says "Terms of Reference and Advisory Report to the Weakfish Stock Assessment Peer Review" dated April, 2006. It's just the title.

MR. SMITH: You're just accepting that title of a report? All right.

CHAIRMAN DANIEL: Anything else from the board?

MR. SEAN MCKEON: Sean McKeon, North Carolina Fisheries Association. I just would like to ask, for a point of clarification, because I'm getting lost, which is not hard to do sometimes.

You have a rejected assessment. The rejectee says the rejecter is wrong and I'm asking, is there precedent to have a peer review presented and then allow the Technical Committee to argue at the board level to reject the peer review? I don't know, because I haven't been around that long. Is there precedent to this kind of presentation, kind of to Pres's point, at this level? Maybe someone could clarify that for me.

CHAIRMAN DANIEL: I don't have the experience that others do, but I'm unaware of that occurring. This is a circumstance where we've been trying to do something for several years now and I think it was good to have Jim and Des at the table at the time of the peer review, but we do have a peer review. It's our process.

One comment was made that we had operated for a long time without peer reviews and we still moved forward and that's true, but that's different than operating with a rejected assessment. There is a difference there.

I think that's what we have to be cognizant of and I think we have to be cognizant of the fact that we are all in a quandary about what's going on here. Mark doesn't have any better idea than I do or than Des does about what's going on with this population and the Peer Review doesn't really know and so where are we on this thing?

I think we've made, with Gordon's help and with everyone's help, we've made some good recommendations on how to move forward with what we've got here before we take any further action. I think it would be a huge mistake for this board to move forward with an addendum with a rejected assessment. That's my personal opinion as your chairman.

We've got a motion on the table to accept the peer review. Is there any further discussion on that motion? If not, do we need time to caucus? No. **If not, all in favor signify by raising your right hand; all opposed same sign; any abstentions, one; null votes. The motion carries.**

DRAFT ADDENDUM I DISCUSSION

That takes us back down to our discussion of Draft Addendum I. I guess our options are to move forward and select a preferred alternative and go out to public hearing and let the chips fall where they may or to hold off and let the recommendations to the board be followed through by the Technical Committee and have them come back to us at our next meeting, if that gives them the time, particularly to address the discard issues, and make their recommendations at that time. I would ask for the board's direction in how to proceed with the addendum.

MR. CARPENTER: Mr. Chairman, I would support the latter option, particularly in view of my request for the Technical Committee to give us a timeline. I would feel a lot more comfortable knowing what kind of timeline addressing these issues is going to take before proceeding to go out to public hearing with the current document as it's formatted right now.

MR. KING: I also could not support going forward with the document. I'm almost numb from

the proceedings of today and I'm hoping the differences aren't irreconcilable and I think there's a lot of coming together we could do, but there's a lot of work to be done before that document goes out.

MS. SUSAN SHIPMAN: I'm sort of where Howard is and that's one reason we abstained on whether to accept or adopt the Peer Review. I've got some real concerns, at least for the southern part of the region. I think there's some real stock delineation questions for the southern part of the region.

We're not seeing what the northern part of the region is seeing and we're in a real quandary. For me, depending on what comes out of this addendum, to go to the legislature, which I will have to do, for a management action based on this science is going to be very difficult.

CHAIRMAN DANIEL: I don't think we need a motion if there is consensus amongst the board members to forward this list of tasks to the Technical Committee and ask that they respond in kind.

MS. SHIPMAN: I have just one other statement on the stock delineation. I'm not sure some of the work is published yet and some of the earlier discussions were to review the published papers. I think we need to dig into what's either in preparation, is currently being published.

There is some work being done in I know Florida and South Carolina, I'm not sure whether they ever have published what Bob Chapman was working on, but there are data out there that need to be mined that may not be in the published literature.

CHAIRMAN DANIEL: That's an excellent point and Bob Chapman did spend many years working on weakfish stock structure genetics with the mitochondrial DNA questions and I don't know if he got as deep into it as satellites, but certainly there is that information available in South Carolina.

MR. GIBSON: Just for my clarification, what's the next step with Addendum I? Would it be to go through this document issue-by-issue and select preferred alternatives? Is that the next place this goes, in the event that we decided that we weren't going to hold back for any additional -- I don't think you can sit pat here and wait for all this information to mature and the discrepancies between the two panels to be resolved.

The more data that gets mined, the more questions

that are going to come to the fore and the more analysis needs to be done and the need for additional technical or outside review on that. I think part of Rome is burning right now and I'm not exactly sure which one it is, because of the questions about stock structure, but I think some of Rome is burning and I think we need a mortality reduction across the range in a precautionary sense.

I don't think we need to accept or not accept a peer review or an assessment to come to that kind of conclusion and to act and so I just want to know what's the next process to move Addendum I forward and is it, again, what I stated before, that we would have to go through this and select preferred options out of each issue where options are offered?

CHAIRMAN DANIEL: That would be the process as set up and my hope would be that at the next meeting if we've got resolution to some of these issues and especially -- If you look at the review or you look at the assessment that came back from the Weakfish Technical Committee, one of the comments that was made was that a reduction in F could have no impact on the stock.

We get the recommendations back from the Peer Review that said we should probably maintain our current measures and address the bycatch concerns and so I guess where I'm looking at this thing is that before we do anything we need to know what the bycatch concerns are and characterize those and identify them so we'll know what to target with any kind of management proposal.

If the board selects at the next meeting -- If we want to go through this addendum and start selecting preferred alternatives for public hearings, that's fine, but I think the very first thing we have to do is be able to know where are we going to direct any reductions.

Right now, I think it would be premature to do that when we don't know what the reductions would entail and I think it would also be a very important thing -- For all of us that have been involved in this fishery for so long, we know how important it is when you start picking reference periods and you say we're going to reduce by 50 percent and what does that mean?

Is that based on 1990 to 1992, 1992 to 1994, the most recent two years, three years? What does that mean? I don't know the answer to that question.

It would be moot if we reducing based on the base

period, because we're already below that level. I think there are a lot of questions that need clarification before we move forward, particularly if we're going to select alternatives that reduce mortality beyond trying to reduce bycatch.

MR. AUGUSTINE: It seems like you hit on a key point and that was reducing bycatch or determining where the bycatch is coming from. Of all the things that we have on the hot list that you've put down there, it appears that that's one thing that's been mentioned by both the Peer Review and the Technical Committee.

Of all the things we have to look at, in the short term it would seem that might be the number one issue and it's possible we can move along forward with this a lot quicker. Otherwise, I see it's another two years we're going to be playing with information and I don't think any of us want to go there.

To take and make decisions now, as has been pointed out around this table, and particularly A.C. Carpenter and he's right on target. We just can't do this and Howard King is the same thing and Susan is the same thing. We would set a very, very bad precedent to do that. If the key issue is discard, let's address it and let's see if we get a result and then how about a timeline? Do they need two months, four months, six months? How long do they need? Let's get to that point, Mr. Chairman.

MR. COLVIN: Once again, I'll read what I thought was a really important sentence in the Peer Review Report: Management needs to be adaptive to see if there's a response in the stock. I read that and I listen to what Mark is saying and I find myself very much in agreement with his perspective and I think that is the approach that we need to be thinking of.

There are a lot of other considerations to be built into that and I don't think that the current draft of the addendum can serve as the springboard for specifying reasonable options today for an adaptive management intervention.

I think we need to get at some of these other questions. I would very carefully note Susan's comments about concerns regarding the stock structure issue and we're asking today for some advice in that regard before we proceed and a management intervention can be constructed once we have that that is cognizant of information we have on stock structure and perhaps tries to treat different stock units differently in an adaptive response.

I don't know, but I can envision a process that might get us there and similarly, with discards, once we compile as much information as we can with respect to where discards may be occurring and what fisheries and what regions and so on and so forth.

Again, we may be able to initiate a management intervention that focuses on that that can be monitored in an adaptive management approach and I think that's good advice and we ought to follow it, but we need that information before we can construct appropriate options for an addendum.

I would also say that from our perspective, given the situation in New York, particularly in eastern New York and I suspect in New England, based on what Mark is saying, that there is interest in our region in trying something, that put it bluntly.

Maybe what we're hearing about the stock structure issue suggests that we might have some effectiveness if we do, but, again, I think we need to get some reasonable options drawn as a result of analysis and the last thing I'll say is that I, for one, do want to know where things got left on the as yet unaddressed issues that came out of SAW 30.

I think that accounting needs to be made to the board so that we can address it and try to understand the ramifications of it in management and the sooner the better so that if there is some opportunity to do something quantitative that we don't now know about, that opportunity is revealed to us.

CHAIRMAN DANIEL: I think, just for clarification, I think you were referring to SAW 40.

EXECUTIVE DIRECTOR VINCE O'SHEA: It seems to me that actually a board that met earlier today was faced with a very similar situation and that is there was concern about a separation of the stock and the health of the stock and there was concern that in some regions that stock might have become depleted and that management board decided to arbitrarily, in some people's minds, separate that stock and moved to take management action while they gather the scientific information to see if in fact the two stocks are different.

Of course, we know that's the menhaden situation and I guess I would -- As this conversation is going on today, I'm beginning to sort of hear the same sort of arguments, that there's an arbitrary line somewhere along the coast, north of which there's one perception of the stock and south of which there's another perception of the stock. There's

already been one board that's decided to take management action until more information is collected.

MR. UPHOFF: In regards to discards, I would like to point out that Janaka de Silva, prior to his departure for Thailand and parts unknown, did an extensive analysis of the discards and so we actually have probably as good information as we're going to have on that, at least through 2002.

We have included the discard estimates in every facet of the analyses that we've done, both the predator/prey and the traditional single species assessments. One of the things, even though it's not necessarily endorsed, but the predator/prey modeling can at least give you some idea of the order of magnitude of losses that you need to have to institute a decline in the stock in recent years.

That decline requires an increase in discards to something six to nine times the level that we've estimate them now and so it may not be the full fledged analysis, but at least in thinking about the idea that the increase in discards has caused the decline, I think it does give some insight as to the magnitude of the problem we must be having for this stock to -- If it has declined rapidly in three or four years, how much discarding has had to have gone out.

It's a complete regulatory failure in that case, because we've created a management situation with so much discarding, if that's the sole cause, that we've collapsed the stock.

CHAIRMAN DANIEL: I feel like I'm at a stopping point. Here's what I would like to do and I think we've got agreement around the table. At our next meeting, the Technical Committee will have had an opportunity to look over the issues and concerns that were raised by the board today.

We will return prepared, once again, to review the Draft Addendum I and if it is felt at that point with the information on discards, hopefully some better information on stock structure, and we'll at least have a timeline and the Technical Committee will have had an opportunity to provide us with their feedback on the Peer Review and then at that point, if it is then deemed appropriate, I think the board can move forward making recommendations for Addendum I. Am I missing something or is that a reasonable approach?

MR. O'REILLY: I think you touched upon

the changing fisheries and one thing that I'm not certain of is just what the fisheries look like these days, both in terms of the recreational and the commercial fisheries.

You mentioned the reference period or the base period, but a lot has changed and the board has done some positive things in terms of helping to curb bycatch problems for a mixed species fishery in terms of raising the bycatch allowance.

Our commercial measures are built on days that are fished or not fished, closed period or open period, and I certainly would have a concern that if we didn't know about all the states and what their current fisheries look like, which fisheries have risen up a little bit -- For example, commercial hook and line in some states, back in 1990 and 1992, it really wasn't there.

Some fisheries have truncated their effort tremendously. The poundnet in Virginia is a particular example and I think we need a characterization of the fisheries before we launch into discussions about where the cuts should occur.

Something we ignored completely through the other addendums was the prorating of the pain and it came up many times, but the recreational fishery, as the stock assessment document points out, in a time series is X amount of the total and generally that's about 30 percent, roughly.

Those type of things have to be thought of as well. Someone needs to look at the intercept data and if we start talking about, well, instead of seven fish at twelve inches why don't we go to five, we should probably know whether five has any significance.

Maybe the practical creel limit right now is more like one or two and so we need that basic information. I'm making it fairly general. I think those who work with the data probably can look at this though. You need that portrayal.

CHAIRMAN DANIEL: I think that gets back to Gordon's comments that maybe the addendum the way it's structured right this minute may not be -- We may need to do some work on the addendum itself to include that information.

I guess my main concern is we get the state compliance reports that do characterize the fishery every year and so we should be able to compile all that information very simply to look at how the fishery has changed.

One of the big concerns that I have is that Janaka's report indicated, or the Peer Review Report or the Technical Report, one or the other, indicated that the bycatch rates were in the neighborhood of 50 percent of the total mortality.

If that's the case, then North Carolina discarded over 400,000 pounds of weakfish last year out of our gillnet fishery that's operating with the L25 for a twelve-inch weakfish. That makes absolutely no sense.

I don't understand where these discards are coming from and that's why before we move too fast I think we need to know exactly where they're coming from, because they're not coming from North Carolina's gillnet fishery, because we don't have a closed season and we're operating with all larger than two-and-seven-eighths-inch webbing. There's a lot of squirrely stuff going on here that I don't understand.

EXECUTIVE DIRECTOR O'SHEA: On your proposed course of action that you outlined a moment ago, you mentioned a list of questions or a list of tasks that you would expect the Technical Committee to look at and address and respond to.

I'm just curious as to what would be the sort of format of that list of questions and how would you propose structuring those questions or to make sure that expectations are lined up in terms of what the board is expecting the TC to answer and they would have a clear understanding of what was expected of them.

We've heard some things today saying things that they were asked to look at in the past were really jobs that were supposed to take three years to do and I'm just concerned about making sure that expectations of what is going to be put to the TC lines up with what the board expects and what were your thoughts on that?

CHAIRMAN DANIEL: I'm, in many respects, relying on staff to have -- We've got the list and if we can present that list to the Technical Committee. They're sitting at the table and so they should be able to have a good feel for what the board is asking them to accomplish, along with the guidance from our staff.

I think they're fairly specific questions. I think it's pretty clear from the discussion around the table where the immediate priorities are for a fuller response and recognizing that maybe the stock

structure question is not going to be addressed by the next board meeting, but certainly if we've got a characterization of discards, we should be able to have that by the next board meeting.

That is the one -- I would be very interested in their response on the Technical Report at well, but as far as where we need to go in order to move forward with the addendum, I think the discards issue is the number one key, but I think they can at least get to all of these fairly simply with Brad's guidance and the guidance of the technical folks that are here with us today, if that's appropriate.

MR. MILLER: Mr. Chairman, I jotted down the three potential charges to the Technical Committee that Gordon Colvin raised and with his indulgence, I would like to, in my own shorthand, just put them on the floor so we understand what the charge to the Technical Committee is.

If I've got these right, Gordon, one was the Technical Committee should consider the Peer Review's remarks on stock separation and update what we know on stock separation; two, compile what we know about discards; and three, review the points raised by the Peer Review Panel and report back to the board on areas of concurrence and areas of continuing disagreement.

I think those were the three charges, basically. I've listened patiently to all the suggestions and I find something to agree with in just about everything that's been said today, but I also agree with Mark Gibson that Rome is burning, but I don't, unfortunately, know where it's burning at this point either.

I would be very hesitant to take any specific action today, but there becomes a time certain where we just are compelled to take action. We've gone out to public hearing with this addendum so long ago now I'm wondering if those comments are still relevant by the time we get around to managing this stock.

That concerns me. The longer we delay, the less relevant those comments we received become and the more in need of updating those comments are. Maybe to the next meeting of this board, whether that be August, I think that would be appropriate and then we should begin to consider what action we're going to take to address what I view as an unacceptable stock status.

CHAIRMAN DANIEL: In addition to those three, we also had a suggestion from A.C. that we

have a specific timeline on when these things could be accomplished and we had a fourth one brought up by Gordon to respond to the 40th SAW suggestions and indicate to us what they were able to accomplish from those recommendations and what were unable to be accomplished due to time constraints and I think that's everything.

MR. COLVIN: Responding to Roy's question, I believe that in fact the first two of his suggested tasks are close enough and actually, I was trying to paraphrase the chairman and so I think I would certainly defer to him on any perfections to those two.

With respect to the third, I think actually it was what Chairman Daniel just mentioned, that my third issue was to ask for an accounting for the disposition of the recommendations for further work out of SAW 40 and to get that accounting to the board so that we understood where all that stood, because it sounded to me as if some of it was done and some it wasn't done and we need to understand where all that lies and frankly, to address the implications in that.

EXECUTIVE DIRECTOR O'SHEA: If you could go back to behind Item 4, we were trying to capture what you were saying and I'm not sure that we really did that very well and it seems that you blended Item 4 and Item 5 together and so I would ask you to give that a look for us, please.

MR. COLVIN: I guess I needed to just conclude by saying that Number 3 was not my suggestion.

CHAIRMAN DANIEL: No, I believe that was Eric's suggestion and I apologize to Eric.

MR. SMITH: If I may, that was my suggestion and Pres made a counterpoint and it left me kind of un-reconciled how the whole board felt. My view was it not should be an armed conflict. I think Pres was in part responding to the fact that it was beginning to sound like it would be and that made him uncomfortable.

I think we need to resolve whether the way it's phrased there -- If the board wants to hear what the differences of opinion might be or whether they don't want to hear that.

MR. MILLER: Just to follow up on my suggestion for Number 3, what I wanted to emphasize is not so much on what areas of disagreement continue, but what areas did they agree

upon. I think that would be most instructive for us.

CHAIRMAN DANIEL: I think that's a diplomatic solution to the problem.

MR. WILLIAM ADLER: This is actually not to the Technical Committee. It's more to the staff while we're looking at things. To separate that what we're talking about here is Addendum I, because Bob sort of set this up a little and we approved Addendum I at the last meeting of this board, but apparently it was part of Addendum I and this is a different part of Addendum I.

To try to clarify that and so it doesn't get too confusing, because in a motion that was made at the last meeting, we did approve it, but I think we approved part of it. Isn't that right, Brad?

MR. SPEAR: That's right, Bill. One of the motions that was made prior to that was to defer action on the commercial and recreational measures of Addendum I until a stock assessment peer review had been completed.

The draft document was provided to you simply to remind you of what was deferred in November and for your discussion today and it's the board's decision to revisit those now or at a later date.

MR. ADLER: I just didn't know if we have a I and a IA or a IA and a IB, but just some clarification there.

MR. SPEAR: It would be the next addendum would be Addendum II. Addendum I has been concluded and this would be an additional addendum to the plan.

MS. SHIPMAN: I share Chairman Pate's concerns in terms of the response by the Technical Committee to the Peer Review and if the board does decide to do that, perhaps that can be handled just as a written response so that the board can move forward with our deliberations. I'm not sure that I'm going to get a lot out of that debate going on at this table.

CHAIRMAN DANIEL: I particularly liked Roy Miller's suggestion, that maybe we change that language to identify areas of agreement with the Peer Review Report.

MS. SHIPMAN: Correct me if I'm wrong. I agree with that, but I think, Roy, your suggestion really was two-pronged. One was areas of agreement

and then the other was of potentially, I don't want to call it rebuttal, but response to areas of disagreement.

MR. MILLER: If I may, Mr. Chairman, I've changed my mind. I think it would be most constructive to agree on areas of agreement and move on from there.

MS. SHIPMAN: I agree with that.

MR. CARPENTER: Looking at the list up there, I just would like to reorder Number 4 and Number 5, because I think producing the timeline really does apply to the questions that were raised in SARC 40, as well as the above items. I think that produces the timeline for all of those things.

CHAIRMAN DANIEL: To address Mr. O'Shea's question, the 40th SAW recommendations were the previous ones, the Norm Hall recommendations, that the Technical Committee went back and -- That's different than the most recent and so I think there is distinction between the two. Did you still have concern?

EXECUTIVE DIRECTOR O'SHEA: Your intent, Mr. Chairman, is that the Items 1 through 4 would come back in August from the Technical Committee, along with sort of a sub-task Number 5 that would be the timeline from the TC about carrying out unaccomplished SAW 40 tasks, but they would have to bring -- Your expectation would be that in August they would come through with answers from 1 through 4, along with a timeline of those bigger SAW tasks that couldn't be done immediately.

CHAIRMAN DANIEL: Yes, and from what I've heard around the table, the sooner the better. I think even if all four are only partly answered, I think this board wants to get moving as quickly as possible addressing these things is what I'm hearing from the board.

EXECUTIVE DIRECTOR O'SHEA: At the end of this whole drill I assume there will be a reaction from the TC of whether or not this is going to be reasonable.

CHAIRMAN DANIEL: Yes, I'm going to ask Des to give us a response to that just as soon as I get the final board comments.

MR. GIBSON: Hearing the response to Bill Adler's question, do I understand now that the process would be that there would have to be an

Addendum II constructed in order to address commercial and recreational fishery measures? We've already dealt with Addendum I and bypassed those and put those on hold pending a stock assessment review and so Addendum I is essentially concluded and we need an Addendum II in order to move with F reduction measures?

MR. SPEAR: The board can take action on the contents that were deferred in Addendum I. Those would be embodied in Addendum II. There wouldn't be the requirement for another public hearing and the board can make that decision and it would just take the embodiment of an Addendum II.

MR. GIBSON: If I could follow up, I don't have any problem with this process, but I believe it would be irresponsible not to see at the upcoming meeting a Draft Addendum II that contains what I just spoke to. This is okay, but I can see dragging this on for a significant period of time beyond August and I think we ought to be prepared to consider an addendum at that time that has F reduction measures in it and potentially respond to what comes forward or what has not come forward at that point.

CHAIRMAN DANIEL: We will have those options at the next meeting.

MR. SMITH: I actually like Susan's suggestion on Number 3 better. I want to see it in writing rather than dueling scientists, because I think it ratchets down the stress level in all of this and I also think it's important to see areas of agreement and where people disagree. I think that's enlightening.

Again, I don't want to decide science, but I want to know where there are points that reasonable people disagree and have an understanding of what the group that we had working on this for two years has to say about it. I think Susan had both of those points in there and I tend to disagree with it that way. I, again, want to see what the board feels.

CHAIRMAN DANIEL: Is there any objection to what's on the board at this point? Are there any additions? If not, then I would ask Des and Jim if they feel this is a reasonable list of tasks that they can accomplish for us by our next meeting and be able to report on that.

DR. KAHN: Mr. Chairman, I personally have a problem with a request to only address areas where we agree. I want to be able to defend this assessment. This is a very one-sided process. I just

have a problem with that. There's another side to this.

As far as the other issues, we would have to kind of talk to some other members of the committee, in my opinion, to get a good idea of how long these tasks would take. I'm not sure, right off hand.

MR. UPHOFF: As far as a north/south split, it is something that the Technical Committee has discussed before. We've presented information to each other. Vic Crecco wrote a report and I put together a PowerPoint presentation on it. It was deferred as an issue.

The information is there. The problem is going to be that if you don't like the information that we have now, the information that we have from North Carolina, well, Cape Lookout down to Florida, is even more deficient. We basically, again, have to track what's going on through an MRFSS catch per effort statistic. We're kind of back where we were, but it's been done and it can be put together.

Discards, you wouldn't believe the amount of information that Janaka de Silva put together on discards. It's nothing short of phenomenal when you look at it. It can be summarized by somebody, but there's going to have to be a lot more people involved in this.

Basically, between Des, Vic Crecco, and myself for this assessment, we carried a big load here. The other members certainly helped, but it's quite burdensome. We have the stuff out there for that.

The areas of agreement or whatever, I suppose that can be done. The accounting for the 40th SAW recommendations, we can make a list of what we've done. Again, the timeline for some of the -- It's going to depend on what kind of an assessment you want, more or less.

An aggregated biomass type of assessment, aggregated index assessment, is not near as data intensive and some of that stuff can be addressed maybe quickly. An age structured assessment is really going to require a lot of retooling and we can't get away, regardless, with some of the deficiencies in terms of the age data that has never been collected.

You may be starting a process that ten years from now you would have an age structured assessment, maybe. You may not end up any better off than you are and so by August, maybe. I just don't know, because until you get in the middle of this, you don't

know what you have.

Again, in asking for information on stocks and so on, we're kind of back to having some unacceptable information, probably, to process. We have looked at a north/south split in terms of reviewing the other studies that have been done, unless somebody has done something since the Thorrold study and I'm not aware of it.

We've kind of reviewed that stuff and actually, to our credit, we had a lot of that information at hand, or some of that information at hand, for the Peer Review Panel, because it really wasn't the charge in the assessment. I don't know. I guess that's an equivocal answer. Right now, I suppose it could be done, but it also might not be, depending on what else comes up.

MR. MILLER: I listened pretty carefully to what Jim just said and I didn't hear a "no" in there. It sounded to me like the Technical Committee could at least consider all of those four items by August.

Obviously we're not asking them to redo a stock assessment in that amount of time and so not to get too carried away with Number 4, but an accounting, to my way of thinking, is a list of what we've done and a list of what we haven't done. They should be able to do that. I didn't see any disagreement with their ability to consider those four items for the August meeting.

CHAIRMAN DANIEL: Are we satisfied with the list of tasks from the board to the Technical Committee? Is there comment from the audience?

MR. FOTE: I am sitting back there looking at Delaware Bay, because it's a real area of concern about the stock of weakfish. If we look at where weakfish was in the 1980s and where it was in the 1990s and where it is now and we look at the other stocks that are in Delaware Bay and where they were in the 1980s, the 1970s, the 1990s and the 2000s, I would appreciate if the Technical Committee, because this is a question I'm going to ask especially when we go to public hearings, would basically put up where striped bass has been from that period of time to right now and where the croaker population has grown from that period of time to this period of time.

We talk about the Delaware Bay during the period of the 1970s and there really was no striped bass fishery. As a matter of fact, as far as the 1980s and into the early 1990s, it was an interesting catch to

catch a twenty-inch striped bass or a twenty-eight inch inside the bay. We are now catching sixty-pound bass inside the Delaware Bay and sixty-five pound and fifty pounds. We're a pretty regular pattern here.

We also have an extreme croaker population that has grown dramatically in the last five or six years. We are basically talking about ecosystem management when we basically look at how every other species affects here and one of the questions is we're looking at where hidden mortality and displacement takes place.

I think that's simple enough data to put up on three lines, where have striped bass gone in the last ten years, where have croakers in the last ten years, and where have weakfish gone and having a comparison chart and I greatly would appreciate that. Thank you very much.

CHAIRMAN DANIEL: Thank you, Tom. I would like to ask Bob to sort of clarify some things about the addendum and ask the questions you need to ask.

MR. ROBERT BEAL: Thank you, Mr. Chairman. It's just a question and I'm not sure if it's for you or for Mark, who brought up the notion of the addendum. At the next meeting, staff has been asked to prepare what we're calling Addendum II and there's been a discussion on what the content of that should be.

The question is the preparation of that document setting up so the board can take final action in August on that addendum or is that once the board sees the document they're going to determine if it's the right content and we're going to initiate another round of public hearings? I just want to control expectations and see what the board would like staff to produce between now and the August meeting. We can do it either way. We just need to know what it is.

MR. GIBSON: I think the board needs to have the vehicle in hand to pull the trigger when it needs to. I think it needs to have the gun in its pocket loaded and be ready to pull the trigger when it feels it needs to on mortality reduction.

I certainly don't want to see a whole other round of public hearings on the same set of mortality reduction options. That's the only analogy I can draw. I sense that the board is not ready to do anything today and may not even be ready then, but there may be information that comes forward that convinces a few

other members to do something.

The gun needs to be in your pocket loaded and ready to fire on mortality reduction and I don't know how your process translates that into meaningful words, but that's the way I describe it.

MR. PATE: I would agree with Mark in regards to the options for reducing mortality, but not necessarily on the possible option of recognizing the north/south split. If we were to make a proposal and hit that with the commission at the first opportunity, which would be August, I question whether or not there would be ample time for airing the implications of adopting such a management tool. I think it's highly likely that we're going to come forward with a recommendation to put that management tool in the box.

CHAIRMAN DANIEL: Anything else?
We have our --

MR. O'REILLY: It will become obvious once ASMFC staff starts to put this together, but we really can't talk about mortality reductions, because one thing Des said earlier is correct. We're not going to have a basis for the fishing mortality rate and we won't know what direction we're going, except indirectly.

If we make harvest reductions, it's going to be an assumption that we're reducing mortality and so I just wanted to bring that out and also to say that's why with this snapshot we have, this peer review and this form of guidance, which is bringing us to some information, as the stock assessment did, it's certainly going to call for a less than five-year time period to get the next peer review in process.

I think the Technical Committee should know about that, that they will be still working and going forward and we hope it's less than five years, because we don't have standards right now for fishing mortality rate, for reference points, and that has to be considered.

ADVISORY PANEL NOMINATION

CHAIRMAN DANIEL: Anything else on this item? The next item on our agenda is the Advisory Panel Nominations. In your packet I have a nomination to the Weakfish Advisory Panel of Chris Heald, a recreational fisherman from Maryland. Howard, do you have anything to say or do you want to make that motion?

MR. KING: **I move that we accept Chris Heald to the Weakfish Advisory Panel.**

CHAIRMAN DANIEL: Motion from Mr. King and second by Mr. Augustine. Is there any discussion on the motion? **Is there any objection? Seeing none, that motion carries.** Is there any other business to come before the Weakfish Management Board? Seeing none, we're adjourned.

(Whereupon, the meeting adjourned at 4:45 o'clock p.m., May 10, 2006.)
