

**PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
WINTER FLOUNDER MANAGEMENT BOARD**

**Atlantic Sands Hotel
Rehoboth Beach, Delaware
October 20, 2008**

Board Approved: February 3, 2009

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1. **Approval of Agenda by Consent** (Page 1)
2. **Approval of Proceedings of February 2007 by Consent** (Page 1)
3. **Move that Delaware's request for de minimis status for the winter flounder fishery be accepted** (Page 4). Motion made by George Lapointe; second by Roy Miller. Motion carried (Page 4).
4. **Move to initiate an emergency rule in December to respond to, number one, GARM III findings and panel conclusions; and, two, the National Marine Fisheries Service interim actions affecting winter flounder commercial and recreational catches/landings** (Page 17). Motion by David Pierce; second by Ritchie White. Motion carried (Page 18).
5. **Move to elect David Simpson as Vice-Chair** (Page 18). Motion by Ritchie White; second by Vito Calomo.
6. **Adjournment by consent** (Page 18)

ATTENDANCE

Board Members

George Lapointe , ME (AA)	Brian Culhane, NY, proxy for Sen. Johnson (LA)
Terry Stockwell, ME, Adm. Proxy	Jim Gilmore, NY (AA)
Doug Grout, NH, proxy for Nelson (AA)	Tom McCloy, NJ, Adm. Proxy
G. Ritchie White, NH (GA)	Gil Ewing, NJ, proxy for Asm. Fisher (LA)
Vito Calomo, MA, proxy for Rep. Verga (LA)	Peter Himchak, NJ, proxy for Chanda (AA)
David Pierce, MA, proxy for P. Diodati (AA)	Erling Berg, NJ (GA)
Bill Adler, MA, (GA)	Roy Miller, DE, proxy for P. Emory (AA)
Mark Gibson, RI (AA)	Harry Mears, NMFS
David Simpson, CT (AA)	Jaime Geiger, USFWS
Mark Alexander, CT Adm. Proxy	

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

Ex-Officio Members

Harold Brown, Advisory Panel Chair

Staff

Vince O'Shea	Nichola Meserve
Robert Beal	Chris Vonderweidt

Guests

Janice Plante, Commercial Fisheries News	Bob Ross, NMFS
Benson Chiles, Atl. Highlands, NJ	Brian Hooker, NMFS
Bill Wolfe, Pew Environ. Group	Michelle Duval, NC DMF
Charles Lynch, NOAA	Patricia Kurkul, NMFS
Linda Mercer, ME DMR	Mark Alexander, CT DEP
Dick Brame, CCA	Dan McKiernan, MA DMF

The Winter Flounder Management Board of the Atlantic States Marine Fisheries Commission convened in the Swan Ballroom of the Atlantic Sands Hotel, Rehoboth Beach, Delaware, October 20, 2008, and was called to order at 4:00 o'clock p.m. by Chairman Patrick Augustine.

CALL TO ORDER

CHAIRMAN PATRICK AUGUSTINE: Good afternoon, all, and welcome to the meeting of the Winter Flounder Board.

APPROVAL OF AGENDA

We're looking for an approval for the agenda, the new one which is being passed out, so let's take a minute to look at that. There have been quite a few changes on it. Are there any corrections or additions to the agenda? Seeing none, the agenda is approved.

APPROVAL OF PROCEEDINGS

Now we'll look for the approval of the Proceedings from the February 1, 2007, meeting. Are there any corrections, subtractions, objection to the approval of the Proceedings of February 1, 2007? Seeing none, the proceedings are approved.

PUBLIC COMMENT

At this time we'd like to open up to the public for any comments that you might have. Please remember that only items that are not the agenda will be reviewed. If you wish to speak, you should have signed up at the beginning of the meeting. If you haven't, we may have time for you to make comments later on. Seeing none, we'll move forward. Okay, Item Number 4, we will now review the Winter Flounder Fisheries Management Plan. Bob Beal will do all of that.

WINTER FLOUNDER FISHERIES MANAGEMENT PLAN

MR. ROBERT E. BEAL: This is kind of a combination presentation of the Fishery Management Plan Review as well as a little bit of history on the winter flounder fishery and also relating it to another species within ASFMC. Obviously, Chris can handle the FMP review, but we thought it might be better if I did some of the historical perspective before Chris' time with the commission, as well as some of the other species' information.

The relevant points kind of in the past or the recent past for winter flounder management, we had the first GARM in 2004. In May of 2004, also, the federal government approved Amendment 13, and I'll speak about that in a little bit more detail later. Framework 42 also impacted winter flounder management. Both of those impacted the days at sea in particular.

Amendment 1 is the ASMFC plan that provides primary management for winter flounder in state waters at this time. That was implemented in June of '05, and I'll talk about that. Amendment 1 created the Gulf of Maine and Southern New England Management Units that we're using to manage the stocks right now.

In 2005 there was a GARM Update, as well, updating the SAW 36. Then in 2008 was the most recent GARM. Dr. Rago is here to present that information, so he can do a much better job with that than I can so I'm going to let him handle that, obviously. Amendment 13 provided the primary commercial management program for winter flounder.

A few years back when Amendment 13 and Amendment 1 were developed, the majority of commercial landings were coming from federal waters, and the vast majority were 90 percent plus from the earlier information. These two amendments in a sense sort of divided and conquered; in other words, Amendment 13 that was developed by the New England Fishery Management Council addressed commercial harvest from federal waters.

There are commercial provisions in the ASMFC Plan, but such a small amount was coming from state waters that they didn't a significant impact. Since Amendment 13 was implemented – when it was implemented there was a seven-inch mesh size, but that was relaxed down to six-and-a-half inches so that has become actually, again, a more relaxed regulation than was implemented earlier.

Amendment 1 is the ASMFC Plan. And as I said, this is primarily the recreational management program. Ninety-plus percent of the landings for the recreational fishery comes from state waters. The percentage of landings from state waters is increasing over time, and I'll talk about that in a minute. Again, it relied on the federal fishery management plan for the commercial management primarily.

There were some mesh provisions and those sorts of things that I will go to in some detail, but the primary program for Amendment 1 was the recreational

fishery. This is a bit of history for the Gulf of Maine stock on landings. The blue bars that are stacked up on top of the tan ones are the recreational landings. The tan ones are the commercial landings.

As you can see, back in the early eighties the landings had peaked around 13 million pounds, bounced around 6 and 8 million pounds for a number of years, but now we're significantly below a million pounds for the Gulf of Maine. As you can see, as time went on the blue bars more or less disappeared from the Gulf of Maine entirely, which indicates that the recreational landings are pretty small.

There is a little sliver blue on top of each of those bars, but it's pretty hard to see and it gives you an indication of what percent of the overall recreational landings are coming out of the Gulf of Maine. This is the same slide for Southern New England and the Mid-Atlantic stock; a similar pattern here.

Even the magnitude is two or threefold higher, the landings peaked around 31 and 32 million in the mid-eighties; have dropped down to about 10 or 12 percent of that in 2007. Again, the blue bars are the recreational landings, and they've all but disappeared from the graph, so it's an indication of the status of the stock or at least the fishery.

Just as a bit of comparison and similar trends, this is the striped bass landings from 1950 to 2007. If you look at the timeframe, about 20 years from where we are now, mid-seventies, you can see a pretty similar decline in landings from the striped bass fishery from the highs of 14 to 15 million pounds down to pretty low levels.

You can see the mid-eighties through late eighties are the years the states had a series in moratoria in place, and those landings that are real low, those four bars are primarily low because of the regulations that were in place, but the stock was in pretty bad shape, and those drastic regulations by the states did turn around the striped bass fishery and allowed it to rebound to where it is right now.

This is a breakdown of the Southern New England recreational harvest. Across the bottom are the waves. The lines, obviously, bounce around a bit; but, as you can see Wave 2 is the left-hand side here, and Wave 2 and 3 are the highest level of landings. The time of the year that the landings are occurring may be important as the board goes through its discussion later on and next steps of what to do with winter flounder management.

If they want to impact potentially Wave 2 and 3 of next year they may want to consider that in the timing of the discussion. This is just a numerical breakdown of what you just saw in the previous slide, averaging '05 through '07. You can see that Wave 2 and 3 land 84 percent of the overall quota, so the bulk of the landings in Southern New England happened March and June.

This is the Southern New England commercial harvest, averaged from 2005 through 2007, so essentially recent history under the current management program that we have right now. The timeframe of these landings is a little bit different. It peaks actually in late summer in August for Southern New England, and the winter fishery is relatively slow but it does ramp up starting in March through June; again, a similar timeframe to the recreational landings.

This is a similar slide of the Gulf of Maine recreational harvest that I had a few slides back. The Gulf of Maine recreational harvest has essentially shifted back one wave, so it peaks in Waves 3 and 4 rather than Waves 2 and 3 as the landings did for Southern New England. As you can see here, Waves 3 and 4 are the bulk of the recreational landings for the Gulf of Maine. Ninety-six percent of them occur in Waves 3 and 4, so, again, that may influence what the board does as far as timing of the next actions.

Commercial landings from the Gulf of Maine are a little bit more complicated. There is kind of a bimodal pattern going on for the last three years. There is a peak in May and then another peak in September, but, again, a similar pattern, they are shifted a little bit later in the year compared to the recreational landings.

This is a state-by-state breakdown of the recreational landings, '05 through preliminary '08 numbers. The bulk of the landings are coming out of New York, New Jersey and Massachusetts, 95 percent or 94 percent, but just as another reference point of where the landings are coming from.

This is new information that was pulled together. It's a little bit preliminary, but it appears to display a shift in the fishery since our last amendment was in place. This is the breakdown of the 2007 landings for winter flounder in the state versus federal waters. The recreational landings, 100 percent of them came from state waters in 2007, so there were no landings from federal waters in the recreational fishery last year.

On the commercial side the landings appear to have shifted to the state waters. State landings are 45 percent and federal landings are 55 percent. This is a shift in the fishery. As I mentioned earlier, when Amendment 1 and Amendment 13 and the earlier actions were implemented, the majority of the commercial landings were coming out of federal waters. Some indications were 90-plus percent were coming out of federal waters.

This shift can either represent the fact that the landings considerably dropped in federal waters and the state landings stayed the same, which equates to a relative increase in state landings or some of the boats, due to the restrictions in federal waters, are actually shifting over and harvesting fish in state waters because of the restrictions in the federal management program.

This is a summary of the current recreational management measures that are included in the fishery management plan. The Gulf of Maine has a 12-inch minimum size, 8-fish creel, and no closed season is required at this time. The recreational measures for Southern New England, these are a little more complicated, 12-inch minimum size, 10-fish creel limit and a maximum of a 60-day open season.

The states are required to have 20 days closed in March or April or at least 20 days closed. They can closer for longer in those months that they choose. This is in recognition that Wave 2 has the highest level of landings for the Southern New England area. The states are not able to split the time closure into more than two blocks.

The Gulf of Maine commercial measures, this is in the ASMFC Plan and not the federal plan, 12-inch minimum size. There is a requirement to remain consistent with the adjacent EEZ harvest and the – I mean, the EEZ mesh limits that are included in the federal fishery management plan. As I mentioned, they're currently 6-1/2 inches. The states are required to maintain their seasonal closures that they had in place prior to Amendment 1 being implemented.

Southern England, a similar plan, 12-inch minimum size, 6-1/2 inch mesh in the cod end, a hundred pound mesh trigger for smaller mesh; so if a vessel harvests more than a hundred pounds they need to have the larger mesh in place. They have to, again, maintain their seasonal closures.

De minimis status is pretty straightforward, landings that average less than 1 percent of the coast-wide fishery for the last three years. The winter flounder

plan allows de minimis states to declare either recreational and/or commercial or request de minimis status for either/or fishery. There are also monitoring requirements that are included in Amendment 1, juvenile recruitment surveys for Massachusetts, Rhode Island, New York, Delaware and spawning stock biomass surveys for Massachusetts, Rhode Island, Connecticut and New Jersey.

The Gulf of Maine recreational measures, this slide is specific to the FMP review and the review of the state regulations relative to the requirements of the plan. All the states for the Gulf of Maine, which are Maine, New Hampshire, and Massachusetts, have regulations in place that meet or exceed the requirements of the plan. Maine has qualified for recreational de minimis but has not requested that this year.

Southern New England, on the recreational side of things, all the states in the Southern New England, which are Connecticut, Delaware, Massachusetts, New Jersey, New York and Rhode Island, have met or exceeded the requirements within the FMP. Delaware qualifies for and has requested de minimis status, so that will be one action point for the board at the end of this presentation.

DELAWARE DE MINIMIS STATUS REQUEST

On the commercial side of things, again, all the states in the Gulf of Maine have implemented the required regulations. Maine and New Hampshire meet the requirements for de minimis but hasn't requested it. The Southern New England and Mid-Atlantic states, again, the same thing, all the states have implemented the requirements of the plan. Delaware has requested and does meet the requirements for de minimis status for the commercial fishery.

The bottom line there is in the last four slides is that all states have implemented regulations consistent with Amendment 1 requirements. Again, the monitoring requirements are consistent with the requirements of the FMP as well for the states.

So just a recap of where we are, I can answer any questions, obviously, on the history of the fishery and relative to the striped bass and some other things has had before them. All states meet the requirements of the FMP. I think the one point of action for the FMP review for the board is to consider de minimis status for Delaware for the recreational and commercial fisheries. Thank you.

CHAIRMAN AUGUSTINE: Thank you, Bob, excellent report and update. It paints a pretty dreary picture. I think we're going to have to look forward to doing and taking some action. While we have that up on the board, could we address or get a motion to support Delaware's request and qualification for de minimis status? Mr. Lapointe.

MR. GEORGE D. LAPOINTE: Thank you, Mr. Chairman. I would move that Delaware's request for de minimis status for the winter flounder fishery be accepted.

CHAIRMAN AUGUSTINE: Thank you. We have a second from Mr. Miller. Any comments from the board members? Any objections? Mr. Simpson.

MR. DAVID SIMPSON: Is there a document in here where they demonstrate the 1 percent?

MR. CHRISTOPHER VONDERWEIDT: Yes, the FMP review was on the CD and it's in that document. Just one point from the presentation, the landings have been updated to use the GARM data, which wasn't available at the time of the FMP review. They may be slightly different, but it should all be in that report. Dave.

CHAIRMAN AUGUSTINE: Thank you, Mr. Vonderweidt. Question by Mr. Grout.

MR. DOUGLAS GROUT: After you deal with the de minimis effect, I have a question for Bob.

CHAIRMAN AUGUSTINE: Okay, are there any objections to the motion? Seeing none, without objection – Mr. Simpson.

MR. SIMPSON: I insist on being a pest. Is this for both the recreational and commercial fishery? Mostly I'm just looking so we can follow our own trail here; this is for both?

CHAIRMAN AUGUSTINE: Yes, he's nodding his head, for both commercial and recreational.

MR. BEAL: They've requested that and qualified for de minimis status for both fisheries.

CHAIRMAN AUGUSTINE: Okay, Mr. Simpson. Seeing no further objections, the motion stands approved without objection. Okay, questions for Bob now on his overall presentation. He covered a lot of material. Mr. Grout.

MR. GROUT: Yes, Bob, I was interested in the slide that showed the shift of commercial effort into state waters, and I was wondering if you knew whether that was a shift that was observed both in Southern New England and in the Gulf of Maine, and if it was the same or different; was there a different distribution?

MR. BEAL: Those numbers are coastwide. I think I do have the data to look at some of the state numbers. Pat may be able to cover that.

MS. PATRICIA KURKUL: Actually those numbers are for Southern New England. I have provided them so I may have confused the issue, but that's Southern New England. If you look at coastwide, more of it is in federal waters.

CHAIRMAN AUGUSTINE: Thank you for that clarification. Further questions for Mr. Beal? Mr. Adler.

MR. WILLIAM A. ADLER: Bob, was it in my dream or at one point was the Gulf of Maine winter flounder stock considered in better shape than the Southern New England stock? And if so, what happened or was that a dream? I can't remember.

CHAIRMAN AUGUSTINE: Would you like Bob or would you like Dr. Rago?

MR. BEAL: I'm not about to comment on Bill Adler's dreams, but I think Dr. Rago will probably cover a lot of the history of the Gulf of Maine status of the stock.

CHAIRMAN AUGUSTINE: Will that be okay, Bill? Thank you. Any further questions? Without any further ado, I'd like to take the opportunity to recognize Dr. Paul Rago who is going to give us a lot of background and some scary information. If you read your briefing book, we have some major concerns, so he'll cover the Gulf of Maine and Southern New England/ Massachusetts GARM III Report.

GULF OF MAINE AND SOUTHERN NEW ENGLAND/ MASSACHUSETTS GARM III REPORT

DR. PAUL RAGO: Thank you, Pat. Ever since I got off striped bass, there was always some trepidation coming before the ASMFC meeting because I would have to give some dreadful information about spiny dogfish. Now that there is some hopeful news on the

spiny dogfish front, I'm faced with the equally dreadful task of talking about winter flounder.

What I'd like to do is to go over the stock assessment of the three winter flounder stocks and to give you a little bit of background about the most recent GARM assessment. I want to acknowledge Steve Correia, who invited me here to present the material. He wasn't able to make it today, so I'm filling in on his behalf.

I'll be talking primarily about what went in the GARM and the stock assessments. Also, I want to acknowledge Mark Terceiro, Paul Nitschke and Lisa Hendricks. They are the true authors of the documents here; and like they say, hard work never killed anybody that supervised it. My role here is to provide the background on the GARM report.

I will give a little bit of background on the GARM, do some of the major conclusions, provide a little more detail on the stock status for the winter flounder stocks, and particularly one troublesome issue will be the rebuilding status. I'll address Bill Adler's comments about this wasn't a dream. In fact, it was in better shape at least in the last stock assessment.

Then there were a couple of things, and I know that there is great deal of interest in the retrospective patterns, and it's also a problem that keeps me awake late at night about our stock assessments, so that is an aspect that we will be addressing a bit. I will go through a little bit of diversion, because I think it will help you to understand where the stock assessment conclusions are coming from.

Then, finally, there was a little bit of ecosystem analysis that was in the GARM so that does have some bearing as well. The GARM itself, this is just kind of a general picture of the reviewers and where they came from around the world. There were three major clusters of reviewers. There were 22 separate reviewers. There were basically 140 papers that were produced as part of the GARM.

Over 70 scientists participated in the process, and there were about 200 people who admitted coming to the GARM. We think there were probably about 300 or so that were actually in the room during those events. We did benefit a great deal from one of the industry-sponsored reviewers or participants in the process, and that was Doug Butterworth. He is the outlier there in South Africa who participated extensively in three of the meetings.

The GARM itself was a complete re-examination of the data. One of the primary focuses that I wanted

for this GARM and I think the committee as a whole was to go back and look at every piece of data with respect to how we allocate the landings to stock areas, how we estimate discards, the magnitude of the precision of the discard estimates, trends in biological parameters. This was a very important aspect in terms of changes that occurred with respect to the underlying biology of many of the species over the past five years.

We also included, by improved models, looking at a longer range of historical data in terms of their use in the assessments; a lot of technical improvements in the handling of the data and in the underlying models. We also improved the model diagnostics and so forth. One of the things that I think was important and significant – I've highlighted it in dull red there on the screen – is the handling of the retrospective pattern.

This was pretty controversial in terms of how we did it and also what it actually means, but it is important for I think improving the quality of advice for management, and so we can talk about that as we go through. Some of the major conclusions from the GARM was there was an improved – and these are the panel conclusions – the improved basis for estimation.

There was a reduction in the average weight and changes in selectivity patterns. Now, for winter flounder we did not see major changes in average weights, and I will show you those plots over time. We did see major changes in selectivity, and these, in fact, are probably most likely due to the changes in the regulations that have occurred, primarily mesh regulations.

There was deterioration in the status for Georges Bank winter flounder and Gulf of Maine winter flounder; that is, they got worse than we thought before. The Southern New England winter flounder is at an extremely low level and owing to its poor recruitment is unlikely to rebuild under the federal requirement for 2014. Then I mentioned the issue of the retrospective patterns and the changes that we've done in response to those estimates.

One of the interesting things, and I won't spend a lot of time on it, but there was very close agreement between the sum of the individual species estimates of the maximum sustainable yield and that which we obtained by doing more comprehensive ecosystem models, so those are on the positive side in terms of what we found.

There are a couple of important caveats when comparing among the GARMs. GARMs are the Groundfish Assessment Review Meetings. That's a new four-letter word we have at the Center. In terms of what has changed – many of the biomass targets have changed. They have declined, gone down; only a couple of them have gone up, and those have been very modest.

It's important to remember, too, that when we report fishing mortality rates, they're expressed as a rate on the fully vulnerable age groups, but because of the selectivity that has changed on these resources; that is, as the force of mortality has shifted toward older individuals because of mesh regulations and also slower growth, they are not exactly comparable as they were historically and so forth.

And then, finally, the reports from the previous GARMs did not include the adjustments for retrospective patterns. The next slide shows kind of a side-by-side comparison. On the left you have the 2004 GARM II results. The right-most column has the 2007 GARM III results; that is, the 2008 assessment period.

The first row there is the overfished condition and overfishing is occurring; that is, they're being removed at too high a rate and the stock is below the overfished status. In the GARM II, the Southern New England and Mid-Atlantic winter flounder was the only one in that box of the three winter flounder stocks. In the 2007 all of them are.

Then is to answer Bill's previous comment there about the Gulf of Maine winter flounder which in the past assessment was not overfished and overfishing was not occurring, so I'll go into some of the background on that as well. This slide is kind of the usual four-quadrant-plot there, and, again, I've just circled the stocks, the Southern New England, the Georges Bank and the Gulf of Maine.

You can see that the Georges Bank winter flounder is just above the line terms of overfishing, but all of them are well below one-half BMSY. One of the things that was an encouraging result in terms of the review of all of the New England Groundfish Stocks was the fact that this average ratio of fishing mortality rates in 2007 compared to the FMSY levels was about 1.4 times higher than the target.

Previously in GARM II, for the 2005 assessment, it was about 2.5, so there has been a significant reduction in fishing mortality on the resource. The expected response; that is, the increase in stock size

moving from left to right on the x-axis there has not occurred except for a few species, most notably, haddock and then Gulf of Maine cod is rebuilding rapidly as well. The next slide is kind of useful.

One of the things that you get by looking at multiple stocks simultaneously is an overall picture of sort of the magnitude of productivity of the resource, and so they're sorted from largest at the top to smallest at the bottom. These are maximum sustainable yield estimates. There are the newly revised ones. You can see that the two largest are Georges Bank haddock and Georges Bank cod, both of which are over 30,000 metric tons a year.

The Southern New England winter flounder comes in at about 10,000 metric tons per year in terms of its long-term potential; whereas, Georges Bank and Gulf of Maine are much, much smaller. Clearly, the Gulf of Maine resource is on the order of a thousand tons, so I'll go into that. The other important thing to remember – and this was commented on by the panel – was the issue of stock structure.

In fisheries assessment you're always working with various types of compromises which arise from the origin of the catch which is defined by statistical area and the indices by which you monitor them; that is, the survey strata, so they don't line up 100 percent, and so depending on how tightly defined the stock structure and depending upon the degree of movement among stocks, you have various issues that compromise or complicate the estimation of important parameters; namely, fishing mortality rates.

The next slide is the survey strata, and the yellow dots represent the average catch rates in our survey and are thought to characterize the current distribution of the resource. This is over a five-year period. One of the important things to note there is underlying that are these series of ten-minute squares which define sort of the historical range of values. The really dark cells represent sort of the preferred or ideal habitat or at least areas where they used to be found in great abundance.

You can see a great deal of scarcity in terms of the observations in the Mid-Atlantic and Delaware north where the current resource is much lower. This feeds into the comments that I'll make about the status of the Southern New England stock. One of the important aspects, as I mentioned, was to try to understand the retrospective patterns, and retrospective pattern is a fancy word that we use to just describe of model fit that arises in the most recent years.

I'll take just a few minutes to go over this part so it will help in terms of the interpretation of the previous patterns and so forth. The retrospective pattern is the consistent change in the estimated quantities that occurs when additional years of information are added to a model; that is, as you add or take away data points or years of data, the model provides an estimate which can be very different from what you see in the previous year.

It has strong implications for fishing mortality, spawning stock biomass and recruitment. It's not a model property, it's not a particular aspect of VPA or models of that type, and it occurs in many of the forward-projecting models as well, but it does provide some insight and indicates that there are some important changes in the underlying process.

Now, this next graph is for Gulf of Maine winter flounder. This is one of the worse instances of this type of retrospective pattern. I can see Mark rolling his eyeballs back there in the back of his head. What we have on the bottom, the lower line there is the stock biomass estimates that you get when you have the entire series. If you progressively take off years of data, you can see that it gives much more optimistic estimates of stock size as you move backwards in time.

So the problem is that when you see a pattern like this that you don't know the true state of nature in the most recent years, if you expect or think that pattern of overestimation of stock size, which has occurred in the last ten years is in fact present in the estimate of the current value, so it's kind of a major epistemological kind of issue about how do you know what you think you know about the status of the world.

In the terms of how we dealt with it we took the approach of saying, well, our expectation is that this pattern remains present in the most recent estimates so therefore it says that estimates which in this instance of about 3,000 or 2,700 metric tons is in fact probably too high, and it's too high by a factor which we try to quantify in the next slide.

We had a number of workshops to try to address this in particular and Bob Mohn from DFO in Canada – we basically look at the average deviation; that is, those vertical lines there that connect the tip to the base there provides you a statistic which says that on the average you have X percent overestimation of stock size and conversely you have X percent underestimation of fishing mortality rates, so it basically shifts your frame of reference from one low value to a high value.

You've seen in the last ten years, if you've got ten heads on the coin, you may begin to think you don't have a fair coin. It's the same thing here. This is just the flip side. This is the fishing mortality rate. Again, in New England this is called the wicked retrospective pattern because it is the worse instance of retrospective patterns. Most of them aren't nearly this bad. The Gulf of Maine winter flounder is the poster child for retrospective pattern.

The panel took a look at everything that we had done and made some recommendations, and, in fact, Doug Butterworth was one of the key people that said if you have patterns of this type, your best option, your best approach for handling that is to in fact assume that your pattern is going to continue at least in the short run so that when you condition your advice to managers, you condition on the expectation that pattern which you have observed in the past or in most recent past is expected to occur in the future.

One of the problems of providing that information in the past has been we don't really have a way of quantifying it. We would provide what would ostensibly be kind of weak advice. We would say take it into consideration; or, it should be carefully considered or things of that sort, which although had the right direction, the right intentions, it didn't provide a quantitative basis for the magnitude of the reduction in fishing mortality or the magnitude of the overestimation of stock size that was associated with that.

We did a number of tests and approaches which were designed to estimate the magnitude of the overestimation of biomass and the underestimation of F. The one that was approved by the panel was the splitting of the time series. In most instances the changes that were related to that occurred around the mid-nineties and so forth.

This was a marked change in the management advice from the previous ones. I'll run through these quickly. If you were at the New England Council meeting in October, you saw some of these presentations before. Essentially you have an estimate of – I'm switching species here just to make things confusing, but the annotated edition is on this. You have uncertainty in the estimates of stock size and fishing mortality rates.

Those are identified by the cross there that identifies the bounds of those two quantities. If you look at the magnitude of the offset that is associated with average changes in overestimates of biomass, you get what we call a row-adjusted method for estimating F and spawning stock biomass.

Now, if you split the series, you get a new estimate of stock size and so forth and fishing mortality rates, which is shown as the so-called split model. This is the model we used for most of the resources for winter flounder. In fact, the Gulf of Maine and the Southern New England both used this split model, so we will see the results of that. That's basically what takes it from that lower right-hand corner for the instance of Gulf of Maine winter flounder and moves it into the upper left-hand corner there, so it goes from the southeast to the northwest, so that is in part what is going on with that estimate there.

Again, this is just some background for reasons for this. There can be unrecorded changes in catches that occur. There can be a change in natural mortality underlying these things. We certainly had some evidence of that for some stocks. There is a change in abundance due to changes in the catchability or the change in distributional patterns, and then, finally, some changes in stock selectivity.

Again, it's important to emphasize unequivocally that this does not resolve the underlying problem. Rather, it indicates where some future work is necessary, but I think and the panel recommendation was that it was appropriate thing to do in terms of providing short-term management advice.

I have individual stock assessments, and so it's just sort of a baseball card approach to describing what is going on with each of the resources. It has GARM I and GARM III. It has the biomass, the value from GARM I to GARM III, and then the biomass in 2007 is below it in parentheses; the fishing mortality rate to give you maximum sustainable yield; and then the current F in 2007; and then the previous and current estimates of MSY .

These are some characteristics of the resource, and I'll go into those when we get some actual data. The next slide, this is Gulf of Maine winter flounder. The change with respect to the $BMSY$ level is really nominal. However, the current stock size, when adjusted for the retrospective pattern, is about one-fourth of the $BMSY$ level or a little over – about one and one-half times in terms of fishing mortality rates for the resource.

The MSY level is down to about a thousand metric tons, so under the current productivity of the resource and current estimates of recruitment patterns it suggested about a thousand metric tons is the MSY level. It's overfished and overfishing is occurring. If there was an F -rebuild date for this, you would fish it at about 0.275. That's a great big if because there is

no rebuilding plan formally in place for this, but this was just kind of an exploratory computation.

If you were to fish at that rate in 2009, it would save about 376,000 metric tons, and the converters to millions of pounds can figure that one out quickly. It's not too much. And there are just more details on it. In the past the change in fishing mortality rates since GARM I has increased, these pluses are sort of qualitative measures of the magnitude of change, and the biomass has gone down.

This slide, these look like stock portfolios, and we see a lot of these go up and down quickly. The commercial landings are shown for the various components. Most of it is otter trawl, but there are commercial gill nets as well. The other gears are really nominal. The next slide, Bob showed you this one already. This just shows the total catch in terms of recreational discards and so forth.

From everything we can see in terms of the estimation, there is very little total discard estimates at least that we see for the Gulf of Maine stock. These, again, is the total catch and the fishing mortality rate. Depending upon whether you used the actual most recent value or the split VPA, so this is the split VPA, this is the base value, you can see that they diverge. This is the fishing mortality rate – this is 7-6-5-4, so this is the difference that's occurring as a result of the change in the models there.

Although the fishing mortality rate has dropped dramatically, it's still above – this is the 0.47 versus the 0.29. This slide also shows the disparity between the estimates of recruitment and the spawning stock biomass. The recruitments are – you can see that the result of this change in the model is that it also reduces the magnitude of the most recent sets of recruits, so that's shown in these open boxes here.

The next slide shows the change in partial recruitment. This is the selectivity at age; this is what it was in '82-'84. They were about 60 percent selected at age three. Presently they're about 15 percent selected at age three. The median age at selection is about three and a half versus – previously it was about two and a half, so there are major changes in terms of the force of mortality and how it's applied to management.

This is indicating that the measures that have been imposed in fact have resulted in the appropriate change or the expected change in reducing fishing mortality on the younger fish. This slide just shows that there is no trend in average weight, and this same

pattern is shown for the other stocks as well. They're unlike Georges Bank haddock, which shows a massive change in the average size of fish at age overtime. This has not occurred here.

This is the base run for Gulf of Maine, and this is Bill's point here. If you were to simply take the status of the resource, and this is the pattern that we saw back in the 2005 assessment, it's above the overfished condition and below the FMSY level. This is a good thing, but when you take that actually into account in the retrospective pattern it pushes it downward in terms of spawning stock biomass and upward in terms of the fishing mortality rate, so that's the nub of the problem here.

The panel comments; I'll just briefly go through these. This one was extraordinarily problematic. In fact, one of the panel noted that the proposed analyses could not be used to provide management advice nor stock projections. Now, they subsequently sort of qualified that by indicating that the current trend was very troubling, and that they generally agreed that it was highly likely that the biomass is below BMSY and that there is a substantial probability that it's below one-half BMSY.

The advice from the panel was equivocal in the sense of it indicated that there was a problem, it indicated that it needed to be – that most likely it was below these levels, but there was too much uncertainty in the status estimates of the resource to do that. In terms of the federal plan, of course – well, I'll leave that at that and we will discuss that at the next meeting, I guess.

The next slide, this is for the Southern New England. The spawning stock biomass at MSY increased; however, the MSY was about the same, so it just basically said because of the change in selectivity associated with this resource, there were no changes in average weights and so forth, but because of the change in selectivity there was a higher biomass that supported this about the same level of MSY.

The current stock size is about 10 percent of the rebuilt status, and it's about two and a half times higher than FMSY; overfished and overfishing, the same story we had before. There is a very strong retrospective pattern, very low recent recruitment, and one of the conclusions of the panel was that the population was highly unlikely to increase without a recruitment pulse that will feed into the notion of rebuilding.

The F-rebuild that will not get you there in 2014 is zero. The catch in 2009 associated with F-rebuild is zero now. I'll go into more details on that. This is just now the typical pattern here in terms of total catch, landings and then the component parts. You can see, as with the Gulf of Maine, the recreational discards and the recreational landings constitute a very small recent proportion of the overall removals from the resource.

This is the average weight plot; again, even squinting it's very hard to see any kind of trend going on there. Statistically there is no trend. This slide is the fishing mortality rate adjusted for the retrospective pattern; again, a good sign that it has come down. The bad sign is that it's still above the overfishing FMSY level. The spawning stock size has made a slight increase in abundance.

On a percentage basis that looks good; on an absolute basis it's still quite dismal with respect to the spawning stock. It's up here in terms of that. The January 1st stock numbers – that is the recruitment – it seems to be several stanzas of high abundance, a decade of moderate abundance, about 15 million recruits per year, and then most recently about 7 or 8 million recruits per year, so definitely a stanza of much lower recruitment.

These are just the uncertainty plots with respect to the stock biomass. We can pass those. This is the uncertainty with respect to the fishing mortality rate, giving you some idea of the magnitude from 0.4 to 1. The next slide is the plots that show the base run and the split run; again, a great deal of uncertainty with respect to the fishing mortality rates, but definitely a little uncertainty with respect to where it is in terms of the spawning stock biomass.

The projection model took into account the current status of the fishing mortality and the total catch in 2007. We just basically assumed that the catch in 2008 was equal to 2007. This was for the basis of the projections. Then there was some evidence from the stock/recruitment relationship that when the resource is below about 5,700 metric tons, that the recruitment tends to be lower.

It tends to be about 11 million recruits per year; whereas, when it's above 5,700 metric tons those, those were the top eight recruitments and the mean was about 35 million tons, so there was about a threefold gain associated with rebuilding the stock to higher biomass levels. The consequence of that is that it's essentially in a hole, if you will. The stock size is very low. The expected recruitments from the

current stock size are expected to be quite low, so that you can't really get yourself out of the hole because of the current level of the resource.

So, as the consequence the probability of rebuilding is zero, and the total catch associated with that has the same value. This slide just shows the expected projection under the F equals zero; again, a highly theoretical quantity, not to be definitive, but it would gradually get up – remember that you're talking about the median SSB exceeding 39 million metric tons, and, in fact, you know, there is less than 1 percent chance of that occurring.

The Southern New England winter flounder – and I just reiterate the panel indicated that the current biomass is extremely low and could remain so until recruitment improved. Then they just had some guidance on which way to go, but as these types of assessments and panel statements tend to be, they highlight the nature of the uncertainty, but generally provide some strong statements about the immediate future of the resource.

This slide is just the Georges Bank winter flounder; a slightly better picture. I'll go through this very quickly. The Georges Bank winter flounder SSB estimates; there was a model change in this case. Previously we used the surplus production model; this was upgraded to a full age-based model for this assessment, so that is probably the biggest measure or biggest source of change in that resource.

It's still probably about one-third of the target value. The fishing mortality rate is just about at FMSY, and the maximum sustainable yield is about the same. There are problems in terms of tracking year classes on Georges Bank, but the predicted landings will be on the order of about a thousand metric tons. There was no retrospective pattern for this resource, but it was both overfished and overfishing was occurring.

This comes back to a point that I highlighted at the first couple of slides here, the stock structure. This is somewhat unusual in terms of – or different from the way stock structure is defined for cod and yellowtail and haddock and so forth. Generally we have 521 and 526; these two statistical areas are imbedded within the Georges Bank stock.

In this case they're separated, and this constitutes the fishing area where removals are summarized. The Southern New England stock extends to 521 and 526 and then it goes out this way, and then, of course, the Georges Bank is above – excuse me, Gulf of Maine. Okay, landings and catch here, the take-home

message here is that the estimates of landings tend to be a large fraction of total catch; that is, we don't see a lot of evidence of discarding of blackbacks, which makes a lot of sense.

This is the mean weights at age; again, no trend. This also shows that change in selectivity; that is, the change from a higher proportion of the twos and threes being captured in the more recent years – I mean, before 2002 – and then the last six years a change toward a lower proportion of selection for the threes and fours.

These are the estimates of the fishing mortality rate; again, this general downward trend over time to just about the FMSY level. This is the spawning stock biomass, not a great deal of trend over roughly a 20-year period. This is the pattern of recruitment for '82 to 2006. The median level is shown in the red line here. Again, similar to what we see in terms of the Southern New England resource, there has been quite a low period of recruitment since 1998.

These are just the uncertainty plots for fishing mortality and SSB, and then this is the plot that shows the range for SSB going this way and then the fishing mortality rate there, so they're in that zone. The panel comments, I won't read them to you; you can probably read faster than I can speak, but one of the things they did reiterate was these stocks should be considered as a stock complex for assessment purposes.

Then there was some question as to why the resource was declining when the harvest had not exceeded MSY levels, and I think they meant FMSY levels as well, but more research is needed. Okay, the end. I'll be happy to answer questions. I know I went through it quickly.

CHAIRMAN AUGUSTINE: Thank you very much, Dr. Rago, very enlightening and very upsetting and informative. Questions from the board of Dr. Rago? Mr. Grout.

MR. GROUT: Paul, having seen this at the council, too, one of the questions that I neglected to ask was looking at the Gulf of Maine assessment and there were problems with the models, and so it was recommended that not be used for management projections, yet the panelists I think used the term that it's probably below one-half BMSY and highly likely that it's below BMSY.

DR. RAGO: Right.

MR. GROUT: Did they give any recommendations about where they thought the fishing mortality rate was; whether it was highly likely that it was above the FMSY or were there any comments like that in there?

DR. RAGO: There was not any specific comment on that. However, I think by virtue of the fact that there is one quantity which is fixed in there, which is the removals, so that is BMSY is below, then it's highly likely that the F is above FMSY, but there was not a direct comment on that.

MR. LAPOINTE: Thank you, Mr. Chairman. First, I was trying to remember in the report to the governor what GARM meant so I googled it; and in googled GARM it's the bloodied four-eyed hound in mythology that guards the path to the dead or something like that. How Freudian can you get?

DR. RAGO: Exactly, yes, and it's not clear whether it's to keep them in or to keep them out.

MR. LAPOINTE: That will come up in the retrospective patterns, I suspect. The retrospective patterns; I mean it makes inherent sense that we adjust for them, but when you talk about work on it, will that cause further whipsawing in future models or will the adjustment for retrospective patterns dampen the big drop in future assessments?

DR. RAGO: Well, that is a very good question. Hopefully not, the whipsawing effect is highly undesirable. It marginalizes the stock assessment process as well as makes your job as managers much more difficult. The intention was to develop measures that were robust, if you will, to use the overworked term "robust" to that type of change. We are also doing a fair bit of work trying to evaluate these approaches as well, and in fact last week we just concluded a two-week meeting of the ICES. The International Council for Exploration of the Sea had a meeting in Woods Hole directly on this topic, or at least about half of the meeting was devoted toward the retrospective issue. It's not just a U.S. problem; it's not just a northeast problem; it's a world-wide issue, particularly with changes in catch streams and other factors going on in terms of stock assessments.

MR. LAPOINTE: Another question; when you talk about ecosystem productivity being down – and a lot of people have talked about it – are there any real management implications for that in the near term or it's I would call it in the realm of a curiosity, and I don't mean that casually, that we don't know what to do with yet?

DR. RAGO: For the winter flounder stocks there was no strong evidence of a change in productivity. There were no changes in average size or changes in maturity.

MR. VITO CALOMO: Dr. Paul Rago, you are the bearer of bad news; there is no question about it. I have a few comments I'd like to make. Dr. Rago, as you know, we are good friends and I don't make mention of you. I just make mention from the commercial fishing power we're about 80 percent what we used to be of 13 years ago.

Eighty percent of the fishing power is gone from U.S. waters. I don't care what coast you're on, it doesn't matter in the United States of America. The closed areas on the east coast are the largest I've ever seen in my lifetime. There are little blocks left where they fish. The days at sea on the east coast are the lowest of all time.

Are we looking in the wrong direction? We're looking at overfished and overfishing is occurring. I know you're just messenger here, and I understand that, Paul, but I get frustrated to hear what is happened. I get frustrated to see that we just keep pounding the fishing industry. I get frustrated to see that what we have for a fishing industry are toys compared to the world fishing powers, and yet we're pounding the living crap out of them everytime a fishery is in the low ebb.

I know we're fisheries management, but there is pollution, environmental conditions, predators, increases in other fisheries, predators, predators, Dogfish being rebuilt always has a hazard on groundfish stocks, I don't care what anybody tells me. I have been in the fishing industry all of my life. I am 64 years old; I was born into it; third generation; and I have seen the plight of the dogfish.

Again, that's just one. The seals are back in enormous numbers. The cormorants are taking tremendous amounts. The striped bass are like pigs in a field; there is no doubt about what they're eating. I'm just saying we pound the living crap out of the fishing industry. I just don't see where we're going all the time. There needs to be something from the people that you represent.

People from the SSC, people like Dr. Brian Rothchild, Dr. Rosenberg, Dr. Butterworth, they have to look somewhere and start realizing that something is radically wrong in another direction. You people are strong advocates to always saying all the fishing is occurring, and the population, it's overfished.

Pretty soon we'll be down to one dory and we'll still be looking at the fishing industry. I don't have the answer, but I do suggest that we start looking at other things and maybe start eliminating other things that weren't even indigenous to the Americas. I thank you for allowing me to make that comment, Paul. You know it's not directed you.

We are friendly and I just get very frustrated after 13 years of listening to this. I get very frustrated seeing the commercial industry dissolved down to about 20 percent of what it used to be. I get very frustrated to see that blackbacks are not coming back when they were supposedly coming back. I just think that we always pound the wrong area. I'm sorry to spout off and I apologize only to the point that I feel mad inside, and it's probably showing, but I thank you for the presentation. I enjoy your presentations. You're to the point and sometimes you make jokes that makes it funny to listen to, so I thank you for that. Thank you, Mr. Chairman.

CHAIRMAN AUGUSTINE: Thank you, Mr. Calomo, that was very articulate as usual. Dr. Pierce.

DR. DAVID PIERCE: Yes, I also like your jokes, Paul. You always keep your good humor, and, frankly, you and your staff continue to do excellent work, no doubt about that, a very thorough presentation regarding these three stocks that should be treated as a stock complex, I suppose,

I've got two questions. My first question relates to the Gulf of Maine assessment that I continue to struggle with. Doug has already noted some of the points made by the reviewers; and for those of you who care to check on the disk, it's page 23-88 of the Gulf of Maine assessment where in the reviewers' discussions they have some very important conclusions that I keep going back to.

I'm going to have to ask you, Paul, to help me out with some interpretation because I still don't get it. They make it very clear that the proposed VPA exhibited a large retrospective pattern that could not be adjusted by splitting the survey time series. I think you indicated that the retrospective patterns resulted in this particular assessment being extraordinarily problematic, which is true.

Then they go on the say a lot of things about the problem with this assessment in that difficulties in the assessment included the lack of tracking of year classes in the surveys and catch, conflicting abundance trends between survey and catch,

estimating survey efficiencies greater than one and so on, they say.

Then they make the very important point that given the problems encountered, the panel agreed that none of the models put forth gave a clear picture of the status of the resource. Further, the panel noted that until these issues were resolved, the proposed analysis could not be used to provide management advice nor stock projections.

Now, I don't dispute the fact that the Gulf of Maine winter flounder, the resource is down and it's not where it needs to be relative to the biomass targets that we have set for ourselves. But with all that said, how do I reconcile their conclusions with the fact that we should consider the Gulf of Maine winter flounder assessment the poster child for retrospective problems?

When I look at the retrospective analyses – and, indeed, it's severe – I don't feel that I should believe those data. I should not embrace those patterns and adjust numbers for retrospective pattern when this retrospective pattern is developed from – originates from the models, the analyses, the models. If the models are problematic and the reviewers' comments are on target, how do I then reconcile those two conflicting – what I consider to be conflicting points of view?

Horrible retrospective analysis; we've got to account for it – horrible retrospective pattern and we have to account for it, yet the analyses really isn't useful for managers' purposes and it's fraught with all sorts of uncertainties, and it is extraordinarily problematic. Help me out, Paul.

CHAIRMAN AUGUSTINE: Do you want to give us a quick answer in about 30 seconds; otherwise it will be a debate for an hour.

DR. RAGO: Thank you, Dave. I guess the short answer is that the landings and total catch are at extraordinarily low levels and have been at flat-lining for the best ten to fifteen years. There has been no response in terms of the changes in stock abundance as a consequence of that. All the evidence suggests that the resource is at a very low level.

I think that was collectively the consideration of the panel. There was a great deal of exploration of an alternative set of models that looked at the length composition data in detail. Those were equally problematic and troublesome. It definitely has all the patterns of a stock that is in a collapsed state, and

there doesn't seem to be a lot of prospects for it increasing in the short run.

How you handle that is a management issue. I think the science has qualified and characterized the uncertainty in probably the best way as it can, but I concur that the information as stated in there says that it's difficult to use for management purposes or projections; however, you don't get richer by increasing the limit on your ATM. The difficulties of withdrawing more from this resource will be seen quite effectively in a future status if they were increased from this point.

DR. PIERCE: I don't agree with you and I prefaced my remarks by trying to make that point. However, you didn't answer my question regarding the retrospective pattern and how should we be guided by that, recognizing the reviewers' conclusions. I'm looking for some – you don't have to answer it now. I suppose we're going to return to this, but it's troubling me and I'm trying to figure out how to reconcile it.

DR. RAGO: Okay, I'll try to answer it. You're right, but one of the things, though, when it determined a retrospective pattern was in fact that it was a pattern, that was consistently overestimating stock size and underestimating fishing mortality rates over time. The preponderance of the evidence, if you will, did suggest that there was a strong pattern in there as opposed to sort of random deviations above and below. Did I answer it?

DR. PIERCE: We'll talk about it at some other time.

CHAIRMAN AUGUSTINE: At the break, thank you, Dr. Rago. All right, I think we've got to move on a little bit. Bob Beal would like to take an opportunity to address the board with some potential management options that we should be considering.

MR. BEAL: Thank you, Mr. Chairman, I'll keep this brief. The hope is that as the board goes into the next discussion, which is deciding on where to go from here with winter flounder, hopefully, this will provide some background structure and head off a lot of questions.

The federal government is working on an action right now in response to the GARM III results. The New England Fishery Management Council and the National Marine Fisheries are developing an interim rule. The idea is that this interim rule would be developed through the next few months and

implemented by May 1, 2009. I think sort of the basis of this interim rule is going to be simple, straightforward and substantial is what we've been told from the Northeast Regional Office staff.

They're working on that document, and the New England Council has provided some guidance and recommendations for the National Marine Fisheries Service to consider as they're working on the interim rule. The long-term management approach to addressing what we have learned from the GARM is through Amendment 16 that the New England Council is going to develop; that is going to be moved forward in the development with the goal of implementation of May 1, 2010.

May 1st is the beginning of the fishing year for the groundfish complex in New England so that's why the May 1st dates occur on both of these management documents. The straightforward options are three options for the ASMFC to consider, this board in particular; emergency rule, fast track an addendum or just a regular-paced addendum.

Regarding an emergency rule, the ISFMP Charter has the following language in it. I don't think I will read it all, but I think the last couple of lines, "There has been placed substantially at risk by unanticipated changes in the ecosystem, the stock or the fishery." That's the health or conservation of the resource. The unanticipated changes in the stock I think is probably a case that may be before the board today.

I think folks were hoping that as we moved forward and got new information with the winter flounder stock things would be in better shape rather than worse shape, given Amendment 1 at the commission and Amendment 13 at the federal level and Framework 42 as well.

Emergency rule, some of the basics there, requires two-thirds of the vote of all the voting members of the management board; established for 180 days and can be renewed for up two periods of 180 days, provided the board is working on an additional management document. It requires four hearings within 30 days of approval, and the board decides when the document is valid, but it can be valid essentially immediately, depending on the states' ability to go home and implement regulations consistent with the emergency rule.

A couple of benefits for an emergency rule is that it would allow – if the board were to go down this route, it would allow for changes that could take effect and influence the late 2008 fishery as well as

the early 2009 fishery and start to react to the information that we hear in the GARM report. An emergency rule will also provide time for the board to develop a long-term management program for winter flounder.

Amendment 1 took about two and a half years to pull together. Throughout that process there was a pretty extensive adaptive management section that was developed. It provides this management board a lot of latitude as far as commercial and recreational management measures that can be implemented through the addendum process, if that's the route this board chooses to go.

BOARD DISCUSSION OF MANAGEMENT ACTION NEXT STEPS

One of the major stipulations is that it requires a 30-day public comment period to develop an addendum. One potential timeline for a fast-track addendum would be to initiate an addendum here at the annual meeting, have a special meeting sometime in November or December to approve that document for public comment. Public comment would take place December and January. Final approval could be in February.

Again, depending on the timeline that the states are able to go home and react to an addendum, this may be able to influence the way the early 2009 fishery is prosecuted. This timeline, again, is the fast track, and it assumes that the document would be relatively straightforward and wouldn't take extensive technical analysis to pull it together. This is sort of the ideal situation or the ideal set of conditions for an addendum to occur quickly by next year.

If the board were to initiate an addendum sort of I guess on the regular pace, they could start something this week, have the document developed between now and the winter meeting in February, approve that document in February for public comment, have public comment in March and April and then final approval in May.

This does provide some more time for the plan development team and the technical folks to work, but it probably will preclude anything on the early 2009 fishery as far as changes to the management program. I can answer any questions, but that's just some of options available to the board.

CHAIRMAN AUGUSTINE: Thank you, Bob. Nichola, would you go back to slide that shows the three options that we would decide from to state with.

Questions from the board? It's obvious we're in a precarious situation. It looks as though we've got to take action. The question is which method do you want to use? Mr. Lapointe, would like to start that off, please?

MR. LAPOINTE: Thank you, Mr. Chairman. It comes first with a question. It's hard to know – if we want to have some coordination with the federal process, jumping into our process before we know what is in the interim rule strikes me as probably not the right place to start, so I'm going to ask Pat, if I can, when the interim rule is going to come out. It strikes me that we ought to use that as a stake in the ground from which to discuss then what action we take after that, if it's not too long.

CHAIRMAN AUGUSTINE: Thank you. Dr. Pierce, with your indulgence, please, Ms. Kurkul, could you help us on this?

MS. KURKUL: Yes. Let me talk about the timeframe but also add a little bit on what might be expected in the interim rule. The timeframe, if we move forward with an interim rule, we would hope to have a proposed rule on the street in November; and then, of course, the public comment process and the final rule in March of 2009.

The other thing to keep in mind is, of course, we're dealing with all 19 stocks in that interim rule. For Gulf of Maine winter flounder and for Georges Bank winter flounder, those are not likely to be the stocks that are driving the management program. For Southern New England winter flounder, on the other hand, where we need essentially a zero fishing mortality to rebuild, then, clearly, that's going to be the driver in Southern New England; and I think given that, you certainly know the kinds of measures that we'd looking at for Southern New England.

CHAIRMAN AUGUSTINE: Thank you, Ms. Kurkul. George, do you want to follow up or are you happy with that?

MR. LAPOINTE: Not yet, so let somebody else speak.

DR. PIERCE: Regarding emergency rule or fast-track addendum or addendum, I, like George, first would like to step back a little back and determine to what extent states' waters catches are contributing to the problem and would hinder the National Marine Fisheries Service in its attempts to rein in fishing mortality and, of course, to rebuild.

Clearly, whatever the Service does through interim action will affect federal permit holders regardless of where they fish, including inside state waters. Certainly, there is still some fishing within state waters, but I would wager that for the most part – well, anyways, from what know, for the most part that take would be in the commercial fishery by those individuals with federal permits.

I would like to know what the breakdown is of federal permit take of winter flounder in state waters versus just state permit holders who do not have federal permits. With that information in hand, we're in a better position to know what needs to be done and how fast. With regard to the recreational fishery, that's a bit of puzzle because as we all know, for those of us who have been around the table for ten years-plus – and I'm one of those guys – the ASMFC, this particular board has taken many actions to restrain the recreational fishery rather significantly to respond to our knowledge that mortality was too high in the past, still is.

The resource still is at low abundance for the most part in these areas, so we seriously significantly restrained the recreational fishery. If you look at the table – well, you probably can't; I'll just note the number – Table J-2 in the stock assessment for Southern New England/Mid-Atlantic winter flounder indicates very clearly that landings in the eighties and landings in the 1990's were fairly high, relatively speaking, to where they are now.

Now they're a shadow of what they used to be for reasons; one being the rules and regulations we implemented to restrict the recreational fishery; and, of course, fewer fish. That's my puzzle; I'm not sure what to do with regard to the recreational fishery, how much more do we need to do, to what extent is the recreational fishery contributing towards total fishing mortality.

That may be identified in the stock assessment; I've got to get back to that. I need that data to help me with my response. In addition, I'd like to ask Pat a question; actually, it's a clarification, Mr. Chairman. Pat has got a tough job here relative to Southern New England/Mid-Atlantic winter flounder.

Clearly, she has already indicated we need a zero fishing mortality, and I think she said – and I'm paraphrasing – that we know what you're going to do, and we should be guided by that, but I don't think we do know what you're going to do. Could you give us some further guidance? Is it going to be zero possession so all winter flounder that are caught must

be thrown back; very significant, widespread closed areas, and that's tough if we're going to have a zero mortality.

If you're in a position to – and maybe you're not because I know you're in your early stages of developing your strategies, Pat, but if you can share something with us, that would also help us get a better feel for the severity of the measures you intend to implement to accomplish what appears to be a zero fishing mortality.

CHAIRMAN AUGUSTINE: David, there's two parts to that. The first part I'd like to have Bob Beal look at; and then if Pat so desires, Ms. Kurkul could try to respond.

MR. BEAL: Well, I guess just to reiterate the point I made in my first presentation was that for 2007, the Southern New England/Mid-Atlantic area, 45 percent of the commercial landings are coming from state waters. The remaining 55 percent is coming from federal waters. On the recreational side, 100 percent of the recreational landings are coming from state waters; and that's coastwide, the 100 percent.

DR. PIERCE: Could you clarify that, Mr. Chairman, because you didn't get to it. You gave those percentages, but that doesn't break it down federal permit holders fishing inside state waters versus just state-permitted fishermen.

MR. BEAL: My next sentence was going to be the analysis that I've seen doesn't have the resolution to describe what David is asking for, the breakdown of what percentage of state water landings are coming from federal vessels. We don't have that information at this time, and I don't know if the data that's out there, if there is enough resolution in that data to pick that apart or not.

CHAIRMAN AUGUSTINE: Good answer. No more questions, Dr. Pierce, not to that one. Ms. Kurkul, would you care to respond or do you have enough information to do that.

MS. KURKUL: Well, yes and no. I can't speak directly to what might be in the interim action. What I was suggesting is that you probably have a fair idea of the kinds of measures we'd be considering to achieve a zero fishing mortality. I appreciate what Dr. Pierce is asking, and I do think that's information that the board would want to look at before they made a final decision, but I don't think that precludes moving forward with action today.

I think there is enough in front of us to know that state action certainly could either compromise or enhance the federal action. We need, I think it's around a 50 percent reduction in fishing mortality in the Gulf of Maine; and, again, Southern England, clearly, any state landings would impact on our ability to achieve rebuilding of this fishery. I would certainly encourage the board to look at either one of the first two options, because I think they're only ones that would allow us to have consistent measures in place by May of 2009.

MR. MARK GIBSON: Thank you, Mr. Chairman. I think I agree with some of sentiments that Pat just relayed. I don't agree that we should wait to see what is in the interim rule. I think it's very clear, to me, anyways, that the Service is going to be shooting for an F equals zero outcome on Southern New England winter flounder. We have evidence of massive overfishing that has been for the period of record of the assessment, at least back in 1982 and a string of a dozen years where F was five times the official mortality rate. It still remains well above it.

The spawning biomass is low, recruitment is weak, but more importantly I think even though the projections have indicated that you can't rebuild in the prescribed time period, both of the projections, one of which is done under the FMSY policy and the other done under F-zero show substantial increases in biomass.

In fact, within a couple of years they tripped the recruitment trigger where you move into the higher recruitment pattern in the projection. There is lots to be gained here and I think we need to configure and initiate an action today to allow us to align with the interim rule as it develops and as it gets implemented.

MR. LAPOINTE: I share the need to take action because I don't think we can sit on our heels and say let's wait to see what the – I mean, let's just kind of piggyback on what the feds are doing, but I still struggle with if we start something today what do we put in it? Maybe closures in Southern New England are as clear to everybody as it may seem, that may be it.

I'm looking at a hybrid and under one of the scenarios it was talking about having an emergency meeting in December. It strikes me that we should commit to that. I think it is important to see what is in the interim action, and it would allow us to mate the two together. So, wait for the sprint until we have the starting blocks and then move quickly as opposed to running now and maybe tripping over the starting

blocks in a month. It strikes me that is a logical progression, but other people may have other views.

CHAIRMAN AUGUSTINE: Thank you, Mr. Lapointe. Are you suggesting then that the emergency rule would be better or are you trying not to make that determination in the December meeting?

MR. LAPOINTE: I guess, again, it depends on what it shows. If the actions are clear, I think a number of people have said that any time that can be gained is good, but at this point I don't know what those actions are.

MR. SIMPSON: Yes, winter flounder are clearly in trouble. We need to do more than a little bit in Southern New England. I am looking at the timeframe for an addendum, as Bob laid out, and that would allow us to implement something for May '09, which would seem to be consistent with the pace of the federal management.

Although I would like to get going on something yesterday on winter flounder, the commission hasn't been really active in winter flounder for some time, and I don't think we're in a position to make a smart move quickly. I think it is going to take us a little bit of time to look at things, closing fisheries.

I don't want to turn this into a massive discarding issue with no landings of trawl gear, but the fishery continues for other species and really not accomplish anything. I think we have the time and it would line up well with the federal process to start a normal addendum. I like the idea of getting going in December as well, meet and try to get some focus, get the technical committee looking at some alternatives and making sure we do something that works for winter flounder.

CHAIRMAN AUGUSTINE: Thank you, Mr. Simpson. Dr. Rago, any points that you want to make at this time?

DR. RAGO: Just a quick point of clarification. First, to echo Mark's comment there that there is a substantial amount to be gained in just a couple of years in terms of pushing it into sort of a threshold where one would expect the recruitment to increase significantly. The second point is the relative proportion or contribution of a recreational harvest to the total mortality within the Southern New England complex is on the order of about 9 to 12 percent over the last five years.

CHAIRMAN AUGUSTINE: Thanks for that clarification. Mr. Grout.

MR. GROUT: I have a comment on the process and then a clarification for Pat. The comment on the process that was brought was that maybe if we were going to wait until December and have an emergency meeting of the Winter Flounder Board, one way that we could take this is to potentially implement an emergency rule at that point in combination with the beginning of an addendum process so that we could react fairly quickly once we had the information as to the general direction that the Service was going to go with. That's a suggestion for right now.

The question that I have for Pat – and I'm still trying to get my hands around – in the Gulf of Maine, given that we have an assessment that the peer reviewers have said should not be used for management or projections, Pat says that we should be cutting our fishing mortality rate in the Gulf of Maine by 50 percent, which is based on an F that came out of an assessment with a retrospective pattern that was not supposed to be used for management according to the peer review.

Picking up this value, are we supposed to use that even though the peer reviewers – is that what the National Marine Fisheries Service is going to use; is it that there needs to be a 50 percent reduction in the fishing mortality rate in the Gulf of Maine even though the peer reviewers said it shouldn't. I also understand, Pat, that there are going to be other species in your interim action that are going to drive this thing. But to throw out that figure of 50 percent, I'm wondering how we can really justify that.

MS. KURKUL: To answer question first, I was just going from the information that Paul presented today. And as you pointed out, that's not what is driving it for us, so it has not been an issue. But, just based on the information that was provided, it's a fairly substantial decrease in fishing mortality that's required; and despite the problems with the models, I think, as Paul said, all the evidence really indicates that we need to take significant action.

Then I had a question I think for Bob. I had understood, when he put up the timeline on the addendum, that for the addendum it would mean that in fact final action wouldn't be taken until May, in which case that would be the board's final action and then the states would still need to implement whatever was approved, which means it could be, depending on the state and their process, significantly delayed after May. Did I misunderstand?

MR. BEAL: Thank you, Mr. Chairman. No, you did not misunderstand. A regular-paced addendum would have final approval at our May meeting; and then depending on the states' timeline, they would need to go home and implement the measures. I guess the other approach may be as Doug Grout suggested, you know, which would work. It would be an emergency action of some sort and then initiate the regular addendum process at an emergency meeting in late November or early December if that's when the board gets together.

CHAIRMAN AUGUSTINE: Thank you. Further comments? Dr. Pierce, a quick one.

DR. PIERCE: Certainly. To Pat's point, even if there was a delay, I suspect it wouldn't be too problematic because at least in state waters the fishery is really most active in the spring and the fall. Spring is going to be missed anyways because of the May 1 implementation, so that shouldn't be a problem.

I would make a motion, Mr. Chairman. I would move to initiate an emergency rule in December to respond to, number one, GARM III findings and panel conclusions; and, two, the National Marine Fisheries Service interim actions affecting winter flounder commercial and recreational catches/landings.

CHAIRMAN AUGUSTINE: Ritchie White seconded. Discussion on the motion?

MR. LAPOINTE: There is not much to discuss.

CHAIRMAN AUGUSTINE: That makes it nice. Mr. Gibson.

MR. GIBSON: This motion doesn't speak to the stock areas, and the question has been repeatedly posed about the Gulf of Maine stock and the assessment or lack thereof for management purposes, so I'm assuming that will just be thrashed out along the way. It's the Southern New England one that has the clearest need and the clearest guidance behind it. This is fine with me, but I'm just wondering about my northern colleagues and where they're going to end up relative to their needs.

CHAIRMAN AUGUSTINE: We'll find out shortly. Representative Abbott, please.

REPRESENTATIVE DENNIS ABBOTT: Thank you, Mr. Chairman. I guess it's assumed in there that we're having a meeting in December?

CHAIRMAN AUGUSTINE: Could we add that so that it occurs at the meeting in December? Is that clear, Representative Abbott?

REPRESENTATIVE ABBOTT: Yes.

CHAIRMAN AUGUSTINE: Thank you. Any further comments? Mr. Lapointe, please.

MR. LAPOINTE: To Mark's question, I like the fact that he might try to get us a get out of jail free card, but I don't think I want it yet. I think we need to look at what is in the assessment comments from the review panel, what they are, but they still show that we're in deep doo-doo. I wasn't going to use the other word, but we need to do something, and so I think what happens in the Gulf of Maine needs to be part of that December meeting and potential action as well.

CHAIRMAN AUGUSTINE: If you want to amend it, you can. Dr. Pierce.

DR. PIERCE: I just wanted to point out for Mark's benefit and for those who are concerned about the Gulf of Maine situation and the quality of the assessment, the reason why I put in "and panel conclusions" is to give us additional opportunity to reflect upon that assessment, and that reflection should occur through some review and advice by our technical committee.

MR. W. RITCHIE WHITE: I think the motion includes all the stocks. I don't see Southern New England being –

CHAIRMAN AUGUSTINE: That's what I thought. Any further comments on the motion? Okay, seeing none, are we ready for a caucus or ready to vote? Seeing none, all right, by a show of hands in support of the motion, please raise your right hand; opposed, same sign; null votes; abstentions. The motion carries 10, 0, 0. Thank you for that motion, Dr. Pierce.

MR. BEAL: Chris and I were just having an offline discussion. I think staff will try to pull together the technical committee and advisory panel via conference call once the National Marine Fisheries Service proposed interim rule comes out and provide some feedback prior to the December meeting, if time allows that to happen. We'll let you know how that progresses when we get to the December meeting.

ELECTION OF VICE-CHAIR

CHAIRMAN AUGUSTINE: Thank you very much. We were very successful in moving this along. I think we're at the election of a vice-chair. Bob, do we have someone? Ritchie White.

MR. R. WHITE: I would like nominate David Simpson, please.

CHAIRMAN AUGUSTINE: I have a motion to nominate David Simpson; seconded by Mr. Calomo. I believe it is a motion to add anybody else is closed and we have one vote; is that true, Mr. Calomo?

MR. CALOMO: Yes.

CHAIRMAN AUGUSTINE: Congratulations, Mr. Simpson, as vice-chairman. Is there any other business to come before this board? Bob.

MR. BEAL: A real quick logistic thing. I was talking to the chairman of the Atlantic Herring Section as well as the chairman of the commission and one thing that may work out is if the Winter Flounder Board needs to get together and the Atlantic Herring Section needs to get together, we may be able to piggyback both of this boards together on the same day up in the New England area and save everybody travel and wear and tear and those kind of things. We'll look into that and we'll be in touch to look for days that will work.

ADJOURN

CHAIRMAN AUGUSTINE: Thanks very much, Bob. Seeing no other business, we are adjourned. Thank you all very much.

(Whereupon, the meeting was adjourned at 5:50 o'clock p.m., October 20, 2008.)