

Atlantic States Marine Fisheries Commission

Atlantic Striped Bass Management Board

*February 7, 2012
4:15 – 5:45 p.m.
Alexandria, Virginia*

Draft Agenda

The times listed are approximate; the order in which these items will be taken is subject to change; other items may be added as necessary.

1. Welcome/Call to Order (*T. O'Connell*) 4:15 p.m.
2. Board Consent 4:15 p.m.
 - Approval of Agenda
 - Approval of Proceedings from November 8, 2011
3. Public Comment 4:20 p.m.
4. Review Interstate Watershed Task Force Recommendations **Possible Action** 4:30 p.m.
 - Law Enforcement Report (*M. Robson*)
5. Review of Connecticut Alternative Management Plan Implementation (*K. Taylor*) 5:30 p.m.
6. Elect Vice-Chair **Action** 5:40 p.m.
7. Other Business/Adjourn 5:45 p.m.

The meeting will be held at the Crowne Plaza, 901 N. Fairfax Street, Alexandria, VA 22314; 703-683-6000

Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015

MEETING OVERVIEW

**Atlantic Striped Bass Management Board
Meeting
Tuesday February 7, 2012
4:15 – 5:45 p.m.
Alexandria, Virginia**

Chair: Tom O’Connell (MD) Assumed Chairmanship: 02/12	Technical Committee Chair: Wilson Laney (USFWS)	Law Enforcement Committee Rep: Kurt Blanchard (NC)
Vice Chair: Vacant	Advisory Panel Chair: Kelly Place (VA)	Previous Board Meeting: November 8, 2011
Voting Members: ME, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, PRFC, VA, NC, NMFS, USFWS (16 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from November 8, 2011

3. Public Comment – At the beginning of the meeting, public comment will be taken on items not on the agenda. Individuals that wish to speak at this time must sign-in at the beginning of the meeting. For agenda items that have already gone out for public hearing and/or have had a public comment period that has closed, the Board Chair may determine that additional public comment will not provide additional information. In this circumstance, the Chair will not allow additional public comment on an issue. For agenda items that the public has not had a chance to provide input, the Board Chair may allow limited opportunity for comment. The Board Chair has the discretion to limit the number of speakers and/or the length of each comment.

4. Review of Interstate Watershed Task Force Recommendations (4:30- 5:30 p.m.)
Possible Action
<p>Background</p> <ul style="list-style-type: none"> • At the November 2011 Board meeting the Board was briefed by members of the Interstate Watershed Task Force on the successful investigation of illegal striped bass harvest and sale in the Chesapeake Bay area. This investigation occurred from 2003-2009 and resulted in 19 individuals and three corporations being prosecuted on over 1 million pounds of illegally harvested striped bass. • The investigation revealed that some of the control measures in place for regulating the harvest of striped bass were ineffective or inadequately designed to maximize compliance. The LEC has developed prioritized recommendations to the Board to increase enforcement capabilities and reduce illegal harvest of striped bass (Briefing CD).
<p>Presentations</p> <ul style="list-style-type: none"> • Interstate Watershed Task Force and LEC Recommendations by M. Robson
<p>Board actions for consideration at this meeting</p> <ul style="list-style-type: none"> • Determine next steps for LEC recommendations (including possibility of initiating an addendum)

5. Review of Connecticut Alternative Management Plan Implementation (5:30 – 5:40 p.m.)

Background

- At the February 2011 Meeting the Board approved an alternative management plan for Connecticut’s commercial striped bass quota. The alternative management plan transferred 23,750 pounds of commercial quota into a “bonus” spring recreational fishing program on the Connecticut River that allowed harvest of 4,025 fish under a 22-28” slot limit.
- In the first year of implementation a total of 80 tags were returned containing information from harvested fish. Four other tags were returned unused. The low harvest rate is primarily attributed to high river flows associated with the wettest year in Connecticut history (**Briefing CD**).
- Per Amendment 6, it is the Plan Review Team's responsibility to evaluate any alternative management plan one year after implementation.

Presentations

- Plan Review Team Report by K. Taylor

6. Election of Vice-Chair

7. Other Business/Adjourn

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**DRAFT PROCEEDINGS OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
ATLANTIC STRIPED BASS MANAGEMENT BOARD**

**The Langham Hotel
Boston, Massachusetts
November 8, 2011**

**These minutes are draft and subject to approval by the Striped Bass Management Board.
The Board will review the minutes during its next meeting.**

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These minutes are draft and subject to approval by the Striped Bass Management Board.
The Board will review the minutes during its next meeting.

INDEX OF MOTIONS

1. **Approval of Agenda** by consent (Page 1).
2. **Approval of Proceedings of August 1, 2011** by consent (Page 1).
3. **Move to accept the 2011 striped bass stock assessment for management use** (Page 13). Motion by James Gilmore; second by Michelle Duval. Motion carried (Page 13).
4. **Move to substitute to postpone further action on Addendum III until the completion of the next benchmark stock assessment** (Page 18). Motion by Pat Augustine; second by Mike Johnson. Motion carried as the main motion (Page 23).
5. **Motion to accept the Law Enforcement Report; and then after acceptance of the report, provide the recommendations to all striped bass jurisdictions and follow up with some of these actually and follow up these recommendations within and between the state jurisdictions to try to prevent some of these obvious issues that are impacting striped bass conservation** (Page 30). Motion by Jaime Geiger; second by Pat Augustine. Motion carried (Page 30).
6. **Motion to adjourn** by consent (Page 31).

ATTENDANCE**Board Members**

Terry Stockwell, ME, proxy for P. Keliher (AA)
 Dennis Damon, ME, proxy for P. White (GA)
 Sen. Brian Langley, ME (LA)
 G. Ritchie White, NH (GA)
 Doug Grout, NH (AA)
 Dennis Abbott, NH, proxy for Rep. Watters (LA)
 Rep. Sarah Peake, MA (LA)
 Paul Diodati, MA (AA)
 Bill Adler, MA (GA)
 Mark Gibson, RI, proxy for R. Ballou (AA)
 Bill McElroy, RI (GA)
 Rick Bellavance, RI, proxy for Rep. Peter Martin (LA)
 David Simpson, CT (AA)
 Rep. Craig Miner, CT (LA)
 Lance Stewart, CT (GA)
 James Gilmore, NY (AA)
 Byron Young, NY, proxy for Sen. Johnson (LA)
 Pat Augustine, NY (GA)
 Russ Allen, NJ, proxy for D. Chanda (AA)
 Tom Fote, NJ (GA)

Adam Nowalsky, NJ, proxy for Asm. Albano (LA)
 Leroy Young, PA, proxy for J. Arway (AA)
 Loren Lustig, PA (GA)
 Bernie Pankowski, DE, proxy for Sen. Venables (LA)
 Roy Miller, DE (GA)
 Tom O'Connell, MD (AA)
 Russell Dize, MD, proxy for Sen. Colburn (LA)
 Bill Goldsborough, MD (GA)
 Jack Travelstead, VA, Administrative Proxy
 Steve Bowman, VA (AA)
 Cathy Davenport, VA (GA)
 James Kellum, VA, proxy for Sen. Sturat (LA)
 Mike Johnson, NC, proxy for Rep. Wainwright (LA)
 Michelle Duval, NC, proxy for L. Daniel (AA)
 Bill Cole, NC (GA)
 A.C. Carpenter, PRFC
 Steve Meyers, NMFS
 Jaime Geiger, USFWS

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

Ex-Officio Members

Wilson Laney, Technical Committee Chair

Staff

Vince O'Shea
 Kate Taylor

Bob Beal
 Chris Vonderweidt

Guests

Heather Corbett, NJ DFW
 Gary Nelson, MA DMF

The Atlantic Striped Bass Management Board of the Atlantic States Marine Fisheries Commission convened in the Wilson Ballroom of the Langham Hotel, Boston, Massachusetts, November 8, 2011, and was called to order at 8:00 o'clock a.m. by Chairman Jack Travelstead.

CALL TO ORDER

CHAIRMAN JACK TRAVELSTEAD: Good morning, everyone. We'll call the Striped Bass Management Board to order. Welcome to the Striped Bass Management Board. We have a relatively short agenda today. We have a number of folks who have signed up for public comment, but it appears they want to speak on the addendum. We will make an opportunity for you to be heard after we move into the motion phase on that addendum.

APPROVAL OF AGENDA

CHAIRMAN JACK TRAVELSTEAD: Before we get there, are there any changes to agenda; any additions? We do have one additional item under Number 6, Law Enforcement Update. There is a request from the Coast Guard for some information that Wilson will apprise us of, so if you could add that. Seeing no other changes, the agenda is approved.

APPROVAL OF PROCEEDINGS

CHAIRMAN JACK TRAVELSTEAD: The proceedings of August 1, 2011, are there any additions or corrections to those minutes? Seeing none and without objection, the minutes are approved.

PUBLIC COMMENT

CHAIRMAN JACK TRAVELSTEAD: Now we'll go to public comment? Are there those of the public who wish to speak on items that are not on today's agenda? Okay, seeing none, we're going to move right along. Number 4, 2011 Striped Bass Stock Assessment Update; Gary, are you going to take us through the assessment?

2011 STRIPED BASS STOCK ASSESSMENT UPDATE

MR. GARY NELSON: Good morning, everyone. Today what I'll do is just present the updated data for 2009 and 2010, show some of the analyses we've done, show the results from the stock assessment

model and the conclusions. Based on that, we have some projections that I will give you.

PRESENTATION OF STOCK ASSESSMENT COMMITTEE REPORT

There are several data sources that were used in the stock assessment. This is primarily the statistical catch-at-age model. We used the MRFSS recreational data, the harvest, and we calculate the dead releases from the release information. We have commercial landings data from all the states that have commercial fisheries. We calculate commercial discards using tag recovery information and also MRFSS releases.

All the states apportion their catches, whether it's commercial or recreational, into age classes, primarily using scales. There are a number of the young-of-the-year age composition and age-aggregated indices that we use in the model to tune it. This slide just shows the commercial and recreational landings in weight.

The commercial is the dotted white line and the solid white line is the recreational weight. You can see here that since about 1998 the commercial landings in weight have been fairly stable, but the recreational landing weights have been increased up to about 2006 and have slightly come down. These are the different sources and these are in numbers. The last slide was in weight. The recreational harvest is in white. The recreational release losses are the blue line. It's hard to see these colors.

The commercial harvest is this line, and the commercial discards are this line. Similar to the weight, the recreational harvest numbers increased and peaked about 2.7 million fish in 2006 and they've declined since then – declined to about 2 million fish in 2010. The recreational losses in the blue line here also peaked in about 2006. They had about 2 million fish and have since dramatically declined to less than 500,000 fish.

The commercial numbers in this orange line have been fairly consistent since about 1998 and so have the discards, although they have been variable over time. Just over to the right on this slide shows the percentage that each component makes up for the total for 2010. The commercial harvest comprised about 53 percent of the total losses; the commercial landings about 27 percent; the recreational discard losses, 14 percent; and the commercial discard loss is about 6 percent.

I'm going to just show some analyses we did looking at trends in the MRFSS data both in the releases and the harvest numbers and, first of all, just do the release numbers. What we did was we used some cluster analysis to try and identify states that had similar trends in their numbers. I'll just show you the recreational stuff first.

For the release numbers, a cluster analysis identified two main groups of states with similar trends. Group 1, which is shown here, with the highlighted states in gray, it consisted of states on the extremes of the striped bass distribution, Maryland, Virginia; and then the New England states of Maine, New Hampshire, Massachusetts and Rhode Island.

The release numbers here peaked in the early – there is one peak in the early nineties and it's kind of flat, but starting about 2004 they increased and peaked about 2006, and then there has been a dramatic decline in all of these states through 2010. The second group that was identified was the states within the center of the distribution here.

They were New Jersey, New York, Connecticut, and Delaware. In this group some of the states increased steadily through the early nineties. They peaked in 2006 – those were New York and New Jersey – or they peaked in 2008, which was Connecticut and Delaware, and then the release numbers declined after that; not as dramatically in New York, but in Connecticut, Delaware and also New Jersey.

And then there was one odd state out, North Carolina, which actually had two peaks. The latter peak was in 2004 and then the numbers declined after that. The trends in harvest numbers; the cluster analysis identified several groups with similar trends, and they were regionally based. Group 1 was Virginia and North Carolina showing that there were peaks in '97 and 2004, and then the harvest slowly declined and rapidly in some cases like North Carolina after that.

The second group was New Jersey and Delaware in the center of the distribution. It showed peaks in 2001 and harvest slowly and rapidly in the case of Delaware declined, but has been fairly stable the last couple of years. The next group included Maryland, New York and Connecticut, which show that harvest was increasing steadily over the time in these three states, and it has been going up in New York but it seemed to have peaked in Maryland and Connecticut in 2007 and 2008, and it has declined a little bit.

The last group was some of the New England states, including Massachusetts, Rhode Island and Maine,

showing a steadily increase in harvest until the mid-2000s, and Massachusetts has decreased a little bit. Rhode Island, although variable, has decreased a little bit, and in Maine it peaked about 2007 and has declined a lot. And then there was one odd state, New Hampshire, that peaked in 2005 and is lower since about 2007.

Some of the influence of those trends could be the current economic condition, so what we tried to do is we developed indices of relative abundance from the MRFSS stuff looking at total catch per trip, and we used GLM models to standardize the intercept data, the raw MRFSS intercept data by county, fishing mode, area fished, avidity index and hours fished.

The GLM-adjusted indices were then used in the cluster analysis. There were essentially four groups identified. Group 1 consisted of states again at the extremes of the migratory striped bass distribution; Maryland and Virginia from the south and then Maine, New Hampshire and Massachusetts from the north, and these are the trends for each of those groups.

The primary characteristics of these trends that drove these groups were these peaks in total catch per trip in 2006 and then declined in that index for all of these states, so those are extremes. And then the few remaining were states from the center of the distributions. This is for New Jersey and Delaware had very similar trends. Delaware peaked in 2007 and has declined and New Jersey has declined since 2005 or so.

Group 3 consisted of trends for Rhode Island and Connecticut. They showed an increasing trend since about 2002 and they're similar, and they only dropped slightly from 2009 and 2010. And then the dramatic one was New York's total catch per trip peaked about 1999, declined, and has been relatively stable since about 2004. The primary contributor to this was the total catch per trip from the private boat mode.

We used all the catch information from the commercial and the recreational fisheries in the stock assessment. They're apportioned by age and this is just a plot of the total catches used in the stock assessment from 1999 to 2010 by age class. What is highlighted here and identified are some of the strong year classes you can see here in blue. This is the 2003 year class and we can follow that through the catches, so that's a good thing.

We used young of the year age one, age-aggregated surveys and also surveys with age composition data, and this just shows the young-of-the-year plots and age one plots for the different states. There are indices from Hudson River, Delaware Bay and Chesapeake Bay. The young-of-the-year index in the upper left-hand corner for New York, which is in the blue, drops from its high in 2008.

The New Jersey young-of-the-year index for Delaware Bay showed an increase since about 2007. The Maryland and Virginia indices, which are in the lower graph here, showed a drop in abundance after 2003, and they show very similar trends. The age one fish, which are in the upper right-hand corner here, for New York, which is done in Western Long Island Sound, has been variable but declining since about 2003, and the Maryland age one index dropped after 2004.

Here is just a slide showing the age-aggregated surveys with age composition data. The upper left-hand corner we have the Connecticut per unit effort that has developed from recreational logbooks. In the blue is an index that we create using GLM models using the MRFSS data for boats only in offshore waters.

The Connecticut CPUE index increased pretty dramatically in 2004 and peaked about 2007 and it has dropped dramatically since then. The MRFSS index peaked about 2008 and has been slowly going down except for this peak in 2006, and it is much lower than it was. In the lower left-hand corner the survey index for Connecticut trawl, it has been pretty variable until the last few years it has been dropping.

In the upper right-hand corner are the results from the survey index from the New Jersey trawl, which has also been declining since 2006 or so. These are these total numbers from the Maryland gill net survey and the Delaware electrofishing survey, and it has been kind of variable. There may have been a slight decline in Maryland, but it's hard to tell. The Delaware declined a bit from the early parts of the time series and have been fairly stable since then.

There are two surveys that aren't shown; the New York Ocean Haul Survey and the NMFS Trawl Survey, which we do use in the assessment but they ended in 2007 and 2006 respectively. We still use them but there is no further data for them. I'll just go over the statistical catch-at-age modeling. This is a forward-projecting statistical catch-at-age model.

It estimates age 1 abundance in each year, fully recruited fishing mortality, catch selectivities, and we model it with four regulatory periods based on changes in amendments, catchability coefficients for all the indices, selectivities for those surveys that have age composition data. This model has not changed since the peer review in 2007, so it's the same one.

We do combine all data for the stocks together and assume an M of 0.15 constant across all ages. This is just a plot of the fishing mortality average 8 to 11, which we use for management in this board. It peaked in 2006 and has declined a little bit and has been relatively stable at about 0.23 since 2008. These are the estimates of abundance; total abundance in age 8-plus abundance from the model.

Total abundance is the white here, and age 8-plus is the blue. You can see that since about 2005 that both have been declining. This slide shows three types of biomass measures; the total biomass, which is this upper blue dashed line; the female spawning stock biomass in this white line; and then the 8-plus biomass in this dashed blue line. This horizontal dotted line here is the SSB threshold.

You can see that the total biomass has been slowly declining since about 2004. Also, the female SSB peaked about 2003 and has been slowly declining and so has the 8-plus biomass, but the female SSB has not reached the SSB threshold. These are the estimates of recruitment from the model, and I essentially show to averages; the average of recruitment from 1994 to 2004; and then the average recruitment from 2005 to 2010 just to show that the recruitment after 2004, which in this case was after the 2003 year class, was about 30 to 50 percent lower on average than the recruitment that occurred during 1994 to 2004. This is the stock-recruitment relationship for striped bass.

The female SSB is on the horizontal axis in metric tons and the number of recruits. The number of age ones are on the vertical axis. The point of this graph is to show that even though we've had really some of the high spawning stock biomass in the last five years, we've had very low recruitment compared to the other years like these points up here.

We're down here and I don't know if you can see those red points. So even though we've had some of the largest spawning stock biomass, we've had some of the lowest recruitment. I'm just going to show you some retrospective plots. This is essentially a retrospective analysis which allows you to observe

the impact on parameter estimates when you take one year's data away from the model.

It gives you an idea of what we would have estimated in the previous years given the deletion of one year's data. Here are the retrospective analyses for age one abundance; 8-plus abundance in the upper right. Lower is the fully recruited fishing mortality, and the lower right is the female spawning stock biomass.

Although we've had retrospective in the past, the last few years it has been pretty stable and we don't expect it to change at this point. If we take all that information, the fishing mortality, the female spawning stock biomass, and compare it to the reference points, this is a plot showing that on the vertical axis is the current fishing mortalities divided by the fishing reference point, which is 0.34 in our case; and on the horizontal axis is the estimates of spawning stock biomass divided by its reference point.

The point of this graph is four quadrants you can have overfishing – I mean, F is over your threshold and you can have an overfished condition when your spawning stock biomass is below that threshold. You could not be overfishing but you could have an overfished population and all the other combinations.

We're actually in the good position here where the conclusion from the model is overfishing is not occurring and the stock is not overfished. That is the take-home message from this slide. We're here – it's hard to see, but we're right in this quad right here. There have been some questions.

Some people have asked what the results of the assessment would look like if the natural mortality rates in the model were increased, so I ran recently the model with an estimate of M of 0.3 across all ages, but there are a few caveats that I wanted to point out before I show you this. First, the stock assessment, the TC has no idea what the M is for a combined stock model. We assumed 0.5, which has been based on a life history theory, but if there has been increase in mortality due to things like mycobacterium we just don't have a good estimate of what that is right now.

There are definite signs of increased mortality in Chesapeake Bay due to myco, but the magnitude of the changes estimated from tagging data appear to be pretty unrealistic. And for at least a related strain related to mycobacterium shottsii, it appears that the progression of the disease may stop with increased nutrition; so a fish migrating from Chesapeake Bay

and migrate out of the Bay, the disease progression may actually stop. We're still debating on what the significance of this disease is.

Recently John Hoenig and Matt Smith of VIMS have showed through a tagging study it does take some time for this disease to progress, and the impact on the population in terms of mortality over time is not as great as once thought because of the lag in its development. Just because you catch myco, it doesn't mean you automatically die, so there are some issues there, too.

A third caveat is there is very little presence of myco in the Hudson and Delaware Bay; so if we used an M that we calculated for the Chesapeake Bay, it wouldn't be appropriate to apply them to the fish from Delaware and Hudson River. Hopefully, in the next stock assessment we will address these issues and include them in the next stock assessment.

These are the Ms that I used that I pulled out of my hat. This just shows the impact of the assessment. Shown in this slide is just the average fishing mortality of 8 through 11 from the current model, which is in white, and then what would happen if you increased M to 0.3 from 1997 to 2010. 1997 is when myco was first detected in Chesapeake Bay and you can see that it lowers fishing mortality.

This is just the female spawning stock biomass of 8 to 11 showing that with higher Ms, the model has to produce higher recruitment, which creates higher female SSB, but in this case the SSB drops more dramatically than it has been in the current configuration. We also did some projections for you. We projected the 2010 abundance at age forward through 2017. We calculated what abundance is exploitable biomass, female spawning stock biomass and expected landings would be based on these forward projections.

We used the selectivity pattern from 2010 and we assumed two recruitment scenarios; a low recruitment, which would be the average recruitment values from 2005 to 2010; and then an average – I don't know why it says "average" – oh, it's the average recruitment scenario but we averaged the recruitment values from 1989 to 2008, and these were the same periods that were used in the August document that the PDT submitted looking at all the different scenarios that you had requested.

We also looked at what would happen to these projections if you changed F. We looked at the current F of 0.23; an F of 0.20, which is a 13 percent

reduction; an F of 0.15, which is a 34 percent reduction; and an F of 0.10, which is a 50 percent reduction. We started these in the projection in 2012 since that's essentially if you were interested in doing that is when regulations would be changed.

On the left-hand side are the projections under the low recruitment scenario and then on the right on the average recruitment scenario. We are looking here at age three through eight abundance in the upper row and then age three exploitable biomass in the bottom row.

At the current fishing mortality of 0.23, under the low recruitment scenario, age three through eight abundance would stabilize and not decline much; but under the average recruitment scenario, regardless of the F you'd see an increase. The age three exploitable biomass, it increases a little bit as fish are growing, but that would increase a lot more under both scenarios with a lower F . The age 8-plus abundances are shown in the upper row and the age 8-plus exploitable biomass in the lower row.

You can see that under the current F in the red here, under the low recruitment scenario the age 8 abundance will decline, but then it will kind of tail off towards 2017. That is under the low recruitment. Under the average recruitment it is the same thing; and if you look at these graphs carefully, they're same graph and that is simply because if the recruitment starts – the average recruitment is higher in 2012 the fish haven't reached age 8-plus by 2017, so these graphs are identical – the same with the age 8-plus exploitable biomass.

Under the exploitable biomass at F of 0.23, it will continue to decline under both scenarios, but with a lower F you can get some stabilization or even an increase. This slide just shows the female spawning stock biomass projections, the low recruitment and average recruitment, and then at the bottom are landings.

Under the current F of 0.23 the female spawning stock biomass will fall below the threshold by 2017, according to these projections, but it would slow down at a lower F , of course. Under the average recruitment scenario, it is very similar. It will just touch the threshold by 2017 under the current F , and then any other scenario of a lower F would slow it down or even increase it.

Of course, in the lower graph, if you reduce F , your landings are going to drop initially, and in some cases, depending on the F , they slowly increase under

the different scenarios. That's it for that part, so Heather is going to take over and talk about the tagging data.

PRESENTATION OF TAGGING COMMITTEE REPORT

MS. HEATHER CORBETT: I came here to show you some of the results from the striped bass tagging. I'm going to talk about the models that were used, some of the results, the area mean F s that were calculated, the different models and also Chesapeake Bay results and future goals of the committee.

All the models used are ones that were shown in the previous assessment. We showed MARK or constant M mainly for comparison and also because those numbers are used to calculate S for the catch equation. In addition we used an instantaneous rates model with nine models and eighteen models. It's a work in progress, something that we're looking into to see if we can get maybe better estimates than we get from the catch equation in the future.

Here is the coastal program mean F s for 20-inch fish for the catch equation, constant M and instantaneous rates. As you can see, the catch equation and instantaneous rates results are similar while the constant M is higher than those numbers. These are the producer area F s for 20-inch fish, and again you can see that constant M values are a lot higher than the other ones.

In the first coastal area F 20-inch fish there is a discrepancy between 2002 and 2003. New York's estimates were a little unrealistic so we tried to smooth that out and those numbers removed from this to see if we could make the numbers look a little bit better. For 18-inch fish, coastal area fish, again you see that the catch equation and instantaneous rates are very similar and constant M is very variable.

And producer area F s for the 18-inch fish, the same kinds of results, the values are fairly low for the catch equation and the instantaneous rates model. These are all the values, everything that has been calculated. You can see for the catch equation and the instantaneous rates for the two period models are a little more similar, somewhat more realistic than what we used to get from the MARK results.

These are the Chesapeake Bay results for F from the 18- to 28-inch category. It is hard to tell the difference this year because the MARK values are so different than the other ones, so we removed MARK from this figure, and you can see the same types of

results; again, instantaneous rates to M and catch equation are almost identical.

The Chesapeake Bay survival estimates in general have been going down except for the instantaneous rates 1M, which has pretty much remained consistent. We have some goals of the committee; mainly that is you get everything down to one model for the analysis so that we're not showing four estimates of F. We're hoping to use the catch equation or instantaneous rates.

We'd like to get a new reporting rate from a high-reward tagging study that was done several years ago. Hopefully, that will help improve the estimates. We also would like to review the list of candidate models for each of the methods that are used to see what is best for each individual state; review model averaging and find out if that's realistic. We hope to get some outside review and get these goals accomplished some time in the winter meeting to have them ready for the benchmark assessment.

MR. NELSON: I just wanted to show you – there is always some discrepancy between the tagging models and the statistical catch-at-age model in terms of F, and that's simply because of the assumptions made between the two. The tagging models were estimating M whereas in the statistical catch-at-age model were assuming it's constant.

But if we take a look at total mortality between the two models, they're very similar. Shown in the white line is the total mortality, the Z estimates from the statistical catch-at-age model; and then the Zs from all the different programs. This is from the MARK model estimates. You can see that the statistical catch at age is right in the middle of all these different programs, so that's a good thing because it's essentially two separate pieces of information are confirming at least the total mortality is the same.

These are the estimates from the instantaneous rates model, which estimates M, and you can see again they're very similar in magnitude. We feel that we're in the correct realm here. They're not showing vastly different in terms of total mortality. Just to tell what we're going to try and do for the benchmark assessment, at minimum this current statistical catch-at-age model will be updated with suggestions made by the last SAW review.

That includes modeling the recreational and commercial fishery data separately. Right now we combined it. It is going to incorporate some different stock-recruitment relationships in the model;

diagnostic plots. Some of the reference points will be generated internally and we're going to try and incorporate the aging bias that we see with scales, and hopefully that will take place. That will be at minimum.

What I'm hoping to get done is we're trying to develop a four-area migration model that will provide separate Fs for each of the producer areas and then the coastal area. You will get separate recruitment estimates and also possibly to get an estimate of stock composition. But if we can't get that work, then we'll at least have the statistical catch-at-age model updated. We're busily starting that process right now. That's it for me.

CHAIRMAN TRAVELSTEAD: Thanks, Gary and Heather. Are there questions on the stock assessment of Gary or Heather? Yes, Ritchie.

CONSIDERATION OF ACCEPTANCE OF STOCK ASSESSMENT FOR MANAGEMENT USE

MR. G. RITCHIE WHITE: Gary, great report as always. In looking at your projections for the spawning stock biomass out to 2017, two questions. One, if you can to expand that another two years, which we know the recruitment already is low for those two years coming into the spawning stock biomass, so 2019 is our first chance for a new big year class; so if we projected mortality out to 2019, we would be overfishing at that point given –

MR. NELSON: Yes, we'd be overfished.

MR. R. WHITE: Okay, the second part of the question; is there any thought that mortality could go up from present rates due to the amount of the spawning stock biomass in that there is a large percentage of fish there of legal size, so anglers are going to have better access to fish they can keep, which then in turn may increase mortality from existing rates?

MR. NELSON: That's possible but it all depends on human behavior and how they respond to the situation, so it's kind of hard to predict that.

MR. R. WHITE: Followup, Mr. Chairman, and that will be last; so if mortality did increase to some degree during this period, then we could be overfishing prior to 2019, and we could be back to 2017, '16 or something; that could be a possibility?

MR. NELSON: Yes, that's possible, yes.

MR. DOUGLAS GROUT: Well, my question on that is I see under the female spawning stock biomass, under the current fishing mortality rate that we'd be overfished by 2017; right, if we're going below the line, it looks like?

MR. NELSON: On the low recruitment scenario it would go below the line. Under the average – and the reason it doesn't go below, it just touches it, is because the female spawning stock biomass – let me just back up and say age four starts to contribute to the female spawning stock biomass. So that's why at least with the SSB the average recruitment does have an impact on that, so it's just going to touch it by 2017.

MR. GROUT: Okay, my second question and this may be more of a question for the benchmark assessment; when I look at your Figure 9, recruitment, age ones, has the technical committee – and I see high recruitment from '94 to 2004 and low recruitment from 2005 to 2010, and then I have heard, although I didn't see in this assessment since you didn't look at 2011 that there was some good recruitment. Is there any evidence here that we might be seeing something of density-dependent recruitment going on here in striped bass where we had so many great recruitments years there from '04 to 2004?

MR. NELSON: I don't know the exact value but from what I was told, the current year, 2011, Maryland's young-of-the-year index is like one of the top five highest, so at least this year has gone back up. I don't know if it's a density-dependent thing. That's hard to say. We've had the low recruitment even with some of the highest SSB, and in the past we've actually from those same levels got higher recruitment. Some of us think it may be an environmental thing that has been going on.

MR. TERRY STOCKWELL: Given the conclusions of the committee, can you project why the stock abundance and landings particularly in Northern New England and particularly with small fish continues to decline?

MR. NELSON: We've tagged some small fish in Massachusetts, the ones we were getting are from Chesapeake Bay. If the recruitment in Chesapeake Bay has been dramatically low than it has been in the past, you're not going to get small fish. The striped bass stock is contracting because of getting small, fish tend to do that. They like primary first and then if the population is too big they start to expand. Maine is at the edge of the distribution. When the

population is going down, you're going to see fewer fish there simply because of that impact.

CHAIRMAN TRAVELSTEAD: Gary, can you put the slide up that shows the juvenile abundance indices for Maryland and Virginia.

MR. NELSON: It only goes up to 2010 on this slide.

CHAIRMAN TRAVELSTEAD: Right, you had mentioned that Maryland's index for this year is I think quite high. Tom, do you have any numbers you want to that?

MR. THOMAS O'CONNELL: Yes, if you pull up that graph, this year's juvenile index was the fourth highest since 1954 and it's comparable to the 2003 year.

CHAIRMAN TRAVELSTEAD: Plus the Virginia index this year was the highest on record, up around 27. Whether that's the start of something good, I don't know, but at least we've got one good year recruitment there. Jim, you had a question?

MR. JAMES GILMORE: Gary, great presentation; it was really helpful. You may have said this, but the benchmark assessment, if we project this right, should be done by the middle of 2013; is that correct? And assuming that, then we have three more JAI points on the graph by the time we get to that benchmark?

MR. NELSON: Just two, 2011 and 2012, but, yes, the current schedule is to get it done and into the SAW by April or May, June or something like that; Kate, do you remember? Is that the schedule? Yes, so by April or May, around there.

MR. MARK GIBSON: Just on the young of the year, while this is here, we were looking on the VIMS and the Maryland websites, I think that Virginia is the highest ever for 2011 and Maryland is right up there on the top – certainly, the top ten if not the top five – so that's good news, but, Gary, can you go back to the plot that has the stock-recruit data where you highlighted the recent year classes.

Yes, one part of me will look at that and say that conforms exactly to one branch of classical theory that William Ricker developed and Robert May later explored the mathematics of it is overcompensation, and it would be exactly what we would expect to occur when a stock reaches an all-time high and then overcompensates and recruitment falls and the stock stabilizes at some sort of a quasi-equilibrium level.

I would ask you another possible explanation is that these year classes have recruited at weakened strength because of increased natural mortality rate; so when you did your simulation of the higher M in the most block of time series, how did it perturb that pattern, if at all?

MR. NELSON: In the example I showed as increased M; it was just 0.3 across all ages.

MR. GIBSON: I thought you started that in 1997?

MR. NELSON: Yes, I did.

MR. GIBSON: Right, so my point is those are more recent year classes; was that body of red points deflected in any way by the change relative to the rest of the body with the increase in M?

MR. NELSON: I see what you're saying. Actually, let me see if I have that; I didn't put it in. No, I didn't put it in. You get the same trend in recruitment. The model is just increasing recruitment even more to make up for those at the higher M. It's the same pattern.

MR. GIBSON: But I'm wondering if those recent year classes – again, yes, they have to be larger in order to sustain a higher mortality rate, but the appearance of an apparent overcompensation disappear when you put in the higher M in the recent years.

MR. NELSON: No, I don't think so, if I remember correctly. I'd have to check for you. I would argue that a Ricker Curve might not be appropriate for striped bass. It's all about mechanisms. Beverton-Holt in my opinion is probably the more correct curve for striped bass.

MR. GIBSON: I don't disagree with that, but it's pretty hard to argue with a textbook example, though, where the curve fits.

MR. NELSON: But it's not a curve-fitting exercise; it's all about mechanisms.

CHAIRMAN TRAVELSTEAD: Dueling. Paul.

MR. PAUL DIODATI: Good job, Gary, to you and your colleagues as always. That was easy to understand and a lot of information. On the female SSB projection, could you say that under average recruitment, does that include the most recent young-of-the-year index?

MR. NELSON: No, it only includes '89 to 2008; so if you added that point, it would probably go up a little bit but not much.

MR. DIODATI: Right, but if even as you add in future young-of-the-year indices that might be better than in the past ten years; is that projection of SSB going to change dramatically or not until after 2017? In other words, you have a trajectory that the projections are suggesting that we're approaching that threshold in 2017 under current conditions or average conditions. I'm wondering if over the next three years, including this year, the young-of-the-year index is substantially improved, how that trajectory might change.

MR. NELSON: Even starting 2011, this year, you won't see much impact on this strong year class because it takes so long for that cohort to contribute to the female SSB, so it may be 2018 and 2019 before you see any effect if we started good recruitment.

MR. DIODATI: So, in other words, the past seven years of average to below average recruitment, it's unavoidable that is going to translate into lower SSB, something that we have to deal with, that we are going to be facing regardless of what we have coming over the next five years?

MR. NELSON: Can you repeat that, Paul, sorry?

MR. DIODATI: It seems to me that given that the past seven years of poor or below average recruitment, it is inevitable that is going to translate into lower SSB over the next several years regardless of what happens over the next three or four years relative to recruitment.

MR. NELSON: Yes, that's true.

MR. RUSS ALLEN: Mr. Chairman, just to add to the young-of-the-year data that has been thrown out here, the Delaware's index this year was the ninth highest on record and would have been a lot higher if not for Hurricane Irene and Tropical Lee which sent a lot of water down the Delaware. Most of our young of year were showing up in the lower portion of our survey and still in substantial numbers, so it could have been as high as a three if we didn't have those two storms come through. Thank you.

MR. PATRICK AUGUSTINE: Gary, one or two meetings ago when Dr. Laney was talking about what happens to the striped bass population, and I really

pressed him hard as to how does striped bass manage themselves. The discussion got quite a bit of attention when I asked what happened with striped bass, will they produce what they have to produce in terms of spawning to satisfy their own needs for integrity of the total striped bass population.

Is there a dynamic that we should be talking about and considering? There was just a question here by Mr. Diodati saying that we won't expect to see the spawning stock biomass increase potentially in the next four or five years because of the status of the eight- to eleven-year-old fish, whatever and what is in the pipeline that will be graduating into the spawning stock biomass.

Is there anything that you can add to the conversation that would enlighten us as to how striped bass end up populating themselves or is it just the nature of the habitat that if there is a lot of abundance of food, bait fish, whatever, that they will multiply in greater quantities? I know we went down that road and it got kind of foggy. I think Dr. Laney might recall that.

I was interested in hearing his concept or how it was presented that if there is a need for maybe that particular specie of fish to propagate or spawn more eggs, that in fact would take care of themselves for self-protection of the species. Is that a theory of is that something we think about or even want to talk about or is that too deep to get us away from the subject that we don't need to do anything today?

MR. NELSON: Well, I wish we knew that, but that there is some evidence, particularly Bob Wood's work out of the Chesapeake, that shows that weather patterns in that area may be impacting the recruitment. I can't remember the exact combination. I think it's wet weather in the early spring seems to be the best for striped bass and white perch in the Bay; whereas, less rain early that season it's detrimental to the recruitment. Right now it's still in the process of being worked on.

MR. AUGUSTINE: Okay, so the same situation could occur, then, if we were concerned about – and I'll bring up the bad word – mycobacteriosis if it gets really worse or doesn't get any worse, that weather conditions could significantly change the population size or the spawning capability of those animals.

I think I can draw that conclusion that we have things that are in nature that we cannot control nor can we project, and it just appears that all of the work that the committee has done and the background – the 688 pages of documentation that say that the stock is

pretty doggone healthy – that we're looking at a sustainable yield and at the same time looking at sustainable spawning stock biomass to carry it through a minimum of 2016, minimum, unless there is a catastrophe and then that will be something else to worry about; and then considering on the sideline the triggers that are built into the FMP where you have addressed the concerns of what is going to happen to certain year classes or what is the size of them, boy, it leads us down a very narrow path as to where we have to go in making our decisions.

I just put that on the record for what it is worth. We've heard a lot of gnashing of teeth concerned about the actual status of the stock, and we, the board, have to take some serious action to prevent a variety of things happening, particularly mortality on the larger fish. I know we've gone off on a venture here in the last couple of meetings saying that we've got to protect, got to protect, got to protect, and at the same time the reality of what you've presented is so starkly black and white that the status of the stock is not in harm's way.

You've given us all the information you possibly can without considering the status of the spawning stock biomass – and, thank God, we had some anecdotal information from Mr. O'Connell and Mr. Travelstead saying that the young of the year is where it is. We haven't had a real spawning disaster to even trigger one of the triggers within the FMP, and we're sitting here gnashing our teeth as to which way to go.

That was why I asked the question about the spawning stock capability of striped bass, what conditions might occur, and we could have another banner year in a row or two banner years in a row, and tried to put this whole meeting in perspective, saying objectively for what has been presented today, it's very difficult to come to any other conclusion than what the stock assessment group has done so far and what the technical committee has recommended.

I just put that on the record for clarity sake. I don't know if you want to respond to any of that or not, but I am interested from a point of view of not your opinion but what the committee came to as a conclusion as to what we have to present to the board that's viable information, black and white, if you will, to help us come to a conclusion and a decision that is objective and not emotional. I think that's where we are. Again, any response that you would make to the comments that I made, I would appreciate. Thank you.

MR. NELSON: Well, the conclusion is that the stock isn't overfished and overfishing isn't occurring. That's it.

MR. AUGUSTINE: That was the answer I needed; thank you.

MR. DAVID SIMPSON: I guess I'm thinking about the issue that Mark brought up and mechanisms that regulate the striped bass population. I think we're all interested in seeing a very abundant, healthy striped bass resource. We know that high populations can lead to certain effects and one of them is disease.

So you've got a pond with a very high stocking density, disease is one perspective on myco. The downturn in recruitment I guess is a question of whether we've had a series of climatic – well, you know, weather conditions that led to poor recruitment, whether it was wet springs or dry springs, that type of thing, or is there a feedback mechanism in striped bass that would suggest that more dome-shaped Ricker function that at a high stock density of, say, two, three, four or five, six-year-old bass, I think they're still hanging out the Bay; you know, they've shifted over at some point in those ages to eating fish, and are they in fact – is that mechanism there where they may feeding on the young of the year and actually undermining recruitment.

When we look at what our sustainable biomass is out there, have we overshoot it a little bit because the older fish eat the younger fish, just like squid do that is a very self-regulating population, or do those intermediate age fish not feed on young of year and so there isn't this linkage. To me that's the mechanism you talked about; you know, is it Ricker shaped or Beverton-Holt?

MR. NELSON: In all of the diet literature that I looked up, I don't remember ever seeing striped bass having striped bass in their stomachs. I don't ever recall that, so I don't know if that's an appropriate mechanism particularly since they move down into the estuary and they may not be able to overlap between this.

DR. JAIME GEIGER: Gary, excellent report, thank you very much. I am struck by this presentation as well as many of the comments around this table, but I cannot help but go back to the original seven hypotheses that we put together on the decline of striped bass in the 1980s. Of all of those original seven hypotheses, the only one we have really

significantly impacted by management actions is overfishing.

Everything else remains active and still remains focused on striped bass mortality and the sustainability of the fisheries. That being said, certainly I think it's clear from my perspective that again I agree with Mark, I see classic symptoms of compensation mechanisms over here. Again, I see a population trying to come at some sense of equilibrium.

I think certainly some of the other symptoms of this fishery, if I had to put it in a simplistic way, red light, yellow light, green light, we have a green light fishery with getting ready to enter possibly a yellow light phase. I think some caution is indicated, but on the other hand I think we have a sustainable fishery, and some of the factors that we may have management control in reality we do not.

One think that I would add to this board is I think certainly the interrelationships and predator/prey relationships, especially menhaden, we need to take more seriously, and certainly I think the success in predator/prey interactions will certainly go a long way to help some of the disease issues, especially myco given the current literature.

But all in all I think that we do have a sustainable fishery. There are certainly other things that the member states around this table can do in terms of water quality contaminants, predator/prey relationships and some of the other hypotheses that are still in play, but all in all I think we are doing okay, but I do think we are getting ready to hit a yellow light, and I'm waiting eagerly for the stock assessment in 2013. Thank you very much.

MR. O'CONNELL: Thanks, Gary, for the great presentation. I was just looking at the agenda and it may be more appropriate for the next agenda item, but will we hear from the technical committee on their perspective as to what management action, if any, should be taken or considered by the board?

DR. WILSON LANEY: The answer is yes, Tom. The technical committee, of course, heard the stock assessment, and I have a very short summary of our thoughts on it. We agreed there was consensus to say that the board isn't obligated to take any action at this point in time. None of the management triggers have been tripped.

As Gary gave in a very excellent report – and I would be remiss, by the way, if I didn't thank Paul and the

state of Massachusetts for Gary's participation in this process and also the other Gary, Gary Shepherd. Both have done a tremendous amount of work on the stock assessment, which is greatly appreciated.

But as Jaime pointed out, caution is dictated since we have experienced that stanza of below average recruitment, and so we have to experience the consequences of that below average recruitment. You've heard from some of the states around the table, though, that the picture for 2011, if you look at the JAIs, is looking extremely good.

North Carolina, Michelle can weigh in and Louis is and give us the North Carolina numbers. I believe Jim also has the New York numbers. We have six juvenile abundance indices and I think we have numbers for all of them with the exception of Maine, which has historically been rather low. They all look very good and those other two folks can weigh in and give you those actual numbers.

The board, should it wish to do so – and that's entirely up to the board – could certainly take some action to further reduce the mortality. As you saw from the addendum, however, based on the motion that was passed, there are a tremendous number of iterations or combinations of management measures that you could take to do that.

Gary has run some projections to show you what the trends look like if we reduce F. If you decide to do that, then the technical committee would very greatly appreciate some guidance from you as to exactly how you would like to do that and measures that you would like to take in order to reduce mortality if you decide to go in that direction. Otherwise, we will be saddled with a tremendous task of, as Gary put it, trying to filter through a near infinite number of combinations and come up with something that would do what you want to do.

Basically, that's where we are on it. You don't have to take any action because none of the triggers have been tripped, but if you decide you want to be cautious and take some action, please give us some additional guidance and direction on what sort of actions you contemplate you would like us to analyze for you.

CHAIRMAN TRAVELSTEAD: By the way, Paul, thanks again for allowing Gary to participate in that process. It was very helpful.

MR. DIODATI: You're very welcome. I have one more question for Gary and then I'll ask you, Mr.

Chairman, if it's appropriate for a motion at this point. We do have a tabled motion from a previous meeting that we seem to be heading in the direction of whether or not we want to entertain that addendum, which was tabled at the last meeting.

I'd like to ask Gary one more question and then maybe consider with you whether or not it's appropriate to bring that tabled motion back on the table. Gary, you had the slide of I think it was the coast-wide removals early on in your presentation. While you're bringing that up, we talk about black and white in this stock assessment and what is clear and what isn't.

The compensation mechanisms that the stock might be exhibiting is probably one of the least clear things to me, although I would love to sit back and say that there are too many fish in the sea, but I'm not of that mind today to do that. I also can't help but look at the very strong young-of-the-year class that we seem to have out there today that has all of a sudden miraculously appeared with very high levels of SSB.

We've been above the threshold for SSB since the nineties, and we seem to have generated very high levels of recruitment during that period every couple of years. That mechanism that we talk about, I could speculate all day whether or not there is some compensation going on, but it's not that clear to me.

What is clear is the coast-wide removals, particularly the release losses in the recreational fishery, that strike me because that's real information, and what represents is tens of millions and perhaps over a hundred million dollars in economy that has been lost over the past several years because of the failure in recruitment in our fishery.

That release fishery is essentially gone. In fact, those releases are now down to levels below what we were experiencing in the early to mid-nineties, before the stock was recovered. So to me that is black and white; that is the yellow signal that Jaime is talking about. I think it is important for the commission to be wary. That was it; I just wanted to see that graph, Gary. I don't really have a question. Mr. Chairman, would it be appropriate to raise the motion back on the table or would you like to get questions from the audience?

CHAIRMAN TRAVELSTEAD: Not quite yet. I think what we need first is a motion to accept the stock assessment report, if we can get through that real quickly. Then I have a couple of other people who still have questions, I think, on the stock

assessment. I would like to hear from them and then Kate will give us a brief summary of the addendum and then I think we'll need a motion on the tabled motion. Let me hear from a couple of other people on the list and then we'll ask for a motion to accept the stock assessment report. Michelle.

DR. MICHELLE DUVAL: Mr. Chairman, just to chime in on the JAI, North Carolina's preliminary JAI is the highest since 2004. It's 15.1. And then just really quickly on below average recruitment, are we referring to below average as compared to the entire time series or is that in comparison to that 1994 to 2004 line that you had across the recruitment scenario? Is it in reference to the entire time series or just that chunk which included a lot of really high recruitment classes?

MR. NELSON: In the projections you're talking about?

DR. DUVAL: Well, I guess when you or Wilson is talking about the below average recruitment that we have been experiencing; is that in reference to the entire recruitment time series of recruitment or is that just in reference to that 1994 to 2004 chunk of time. I think you had two average lines on the graph.

MR. NELSON: Yes, just in reference to that period.

DR. LANEY: Yes, just to further clarify that, Michelle, what we did was run the low recruitment scenario is only based on those recent years from 2005 onward, and the average recruitment is based on the longer time series that Gary referenced, which does include the very strong year classes.

Someone asked us why didn't you run a high recruitment model and we said, well, that really isn't realistic because the striped bass life history is that they tend to produce those dominant year classes very infrequently, so you wouldn't expect to get a consistent period where you were producing dominant year classes every year. That just hasn't proven to be the case, so that's why we did the average, which includes all those highs and then the low which just reflects that recent stanza of low recruitment.

MR. GIBSON: Mr. Chairman, to return to what Dave Simpson said, I think the stock-recruit pattern is key. It's not good enough for us to hear that overfishing is not occurring and the stock is not overfished. We need an understanding of the stock-recruit pattern as it relates to future stock behavior.

The way science works is when theory is challenged with data and if data doesn't support the theory, you have to change the theory. I would also point out that you don't need cannibalism by cod to produce a dome and you don't need red super imposition by Pacific salmon to prove it's a dome.

Beverton-Holt themselves showed that a period of reduced growth related to density in a period of higher vulnerability or prolonged predation will produce a dome, so there are simple mechanisms that explain this, but I won't belabor that point and argue with Gary any further. The point is we need to understand what the stock-recruitment pattern is and what factors in addition to SSB are influencing it for making reliable projections and judgments about the future. I'm trying to get some things on the record that I hope will be part of the benchmark stock assessment terms of reference in the future. I think that's a key piece of information we're going to need. We're going to need to have biological reference points for striped bass that are driven by contemporary stock conditions and contemporary environmental and ecological conditions. Our reference points are obsolete right now at this point. Thank you.

DR. LANEY: Yes, I agree, Mark; and to that point, just to mention a couple of other things, I just happen to have a paper on my hard drive from a diet study that was done by Chuck Manooch back in the seventies. He did look at cannibalism and he reported in that particular study that it was rarely encountered.

He had just two yearling striped bass from over 200 examined, so that was 1 percent which contained young striped bass. So, clearly, they will at times eat the young ones. And then the other point that I wanted to make real quickly is Gary referred to Bob Wood's work, and I think that was the Atlantic multi-decadal oscillation that he and a colleague believe may be influencing recruitment patterns in striped bass. Both of those things are something we definitely should take a look at during the benchmark assessment process. It would tickle me to see us be able to work in some of those environmental factors and improve the robustness of the model if we can do that.

CHAIRMAN TRAVELSTEAD: We're really quickly running through our allotted time, and I'm wondering if we can get a motion to approve the stock assessment at this point and dispense with that. Pat Augustine.

MR. AUGUSTINE: Jim had his hand up, Mr. Chairman, and he wanted to make that, and they want to cut me off for a minute so let him make the motion.

MR. GILMORE: Because if I don't make the motion, we'll be here for three more hours; no offense, Pat. I had two points. Wilson had mentioned the JAI for New York. It's still preliminary because we have another week of sampling to go. It's looking more like it's an average as opposed to a bumper crop, but we essentially have still got to go through the QAQC on it.

It's looking like it's either going to be average or maybe slightly above, but it doesn't look bad. I was just going to make that motion. When Paul said he was going to raise something, Jack, I figured we needed to get this, **so I would move to accept the 2011 striped bass stock assessment for management use.**

CHAIRMAN TRAVELSTEAD: Thank you; is there a second? Seconded by Michelle Duval. Is there any objection to the motion? **Seeing none, without objection the motion is approved.** Tom Fote, you were on the list.

MR. THOMAS FOTE: Yes, I listened to Paul's statement about catch and release. I was wondering if the technical committee is going to look at the fact that the fishing behavior of a lot of the fishermen has changed in the last five or six years. When you look at what was going on ten years ago, most of the striped bass fishermen that were actively pursuing striped bass were catch-and-release fishermen, especially in the New Jersey/Delaware and I think maybe in the New York area.

If you look at because of the regulations on summer flounder, scup, sea bass and the seasons become very short or they're not able to catch fish that are keepable to take home, those fishermen have now become striped bass fishermen. Their behavior is different than the historical striped bass fishermen that went out and mostly catch and release like guys like Fred Schwaab would catch a thousand fish and releases every one of them.

These fishermen go out and catch their two fish and run back to the dock because with gas prices and everything else, they're just harvesting something to eat because they can't harvest anything else. It's changing the behavior of the anglers out there especially in the last four or five years. When the technical committee looks at this in the future, I

really would like them to look at the behavior of the angler and how it has changed over that period of time.

If we start releasing finally the regulations on black sea bass, summer flounder and scup, those guys would sooner eat summer flounder and black sea bass, tautog and everything else and they'll move back off striped bass, so it will change the behavior and it will change the outlook. What I've seen is a dramatic increase of people that want to eat striped bass in the last couple of years and tautog even. That's important and that's not picked up in any of these models and everything else, so I wish the technical committee will look into how that is affecting the stock.

DR. LANEY: Well, thank you, Tom, for that observation, and we certainly have paid attention to that. I'll just note for the record that the technical committee and the stock assessment subcommittee deal with the fish body count basically and changing angler behavior seems to me to be more the purview of the board.

CONSIDERATION OF DRAFT ADDENDUM III FOR PUBLIC COMMENT

CHAIRMAN TRAVELSTEAD: I'm going to move to the next agenda item now and Kate is going to give us a brief summary of the addendum and then we'll consider motions and public comment.

MS. KATE TAYLOR: I will briefly refresh the board on Draft Addendum III, which the board previously saw at the August meeting, and the draft addendum was updated with the results of the 2011 stock assessment per the board's request. The initial motion to the PDT was to begin drafting an addendum aimed at reducing striped bass fishing mortality up to 40 percent and options to protect the spawning stock when it is concentrated and vulnerable.

As I mentioned, that decision to send the document out for public comment was postponed in August. Amendment 6 does contain a number of management triggers that would invoke board action. While these triggers have not been activated, as Gary has briefed us previously there have been declines in catch and abundance and low recruitment has been seen.

Additionally, members of the fishing community have also raised the concern that the availability of striped bass in the coastal migratory population has decreased over the past few years. Current

management measures; generally the recreational management measures include the same minimum size limits for the commercial fishery, a two-fish creel limit, and we are managed under a target F.

As Gary previously showed the board, there were projected estimates of abundance, female spawning stock biomass and landings through 2017, and these projected estimates were developed with recruitment scenarios from age one population estimates. The low and average scenarios were selected in to order to be precautionary when accounting for the impacts of mycobacteriosis on future stock status.

The PDT would again like to reiterate the caveats of these projections; that there is inherent risk and uncertainty in choosing one recruitment scenario over the other; that protection of the spawning stock in one area would not necessarily lead to increased availability of striped bass in other specific regions; and any current changes in management will not be realized in SSB productivity and recruitment for at least eight years.

The projections are summarized in the draft addendum that was on the Board CD. The PDT, with Gary's work, looked at revised Fs of 0.23, status quo; 0.2, 0.15 and 0.1, and he went over those earlier; again, just showing the female SSB projections and the landings projections. The commercial and recreational fisheries management options contained in the addendum start on Page 21 of the document and include options for changes in minimum size, a reduction of the quota, closed seasons and spawning stock protection for the commercial fishery, and those are discussed in the document and are the same as the board saw at the August meeting.

The recreational fishery's management options included changes to the size limits, reductions in the bag limit, closed seasons, changes to the Chesapeake Bay Spring Trophy Fishery, and again spawning stock protection. Those management options remain the same from the draft the board saw at the August meeting.

If the board approves the draft addendum for public comment today, it would go out for public comment in December and January with the board reviewing the public comment and considering the addendum for final approval in February, and the provisions of the addendum could be implemented as early as March 2012.

Included in the briefing material was public comment that was received. There was a letter from the Maine

Association of Charter Boat Captains as well as 34 individual public comment letters to request the board approve Draft Addendum III for public comment. Thank you, Mr. Chairman.

CHAIRMAN TRAVELSTEAD: Thank you. Vince has reminded me that the motion made at our last meeting was a motion to postpone until a presentation of the stock assessment at this meeting. It was not a motion to table, so we don't need a motion to remove it from the table. Since the stock assessment has been presented, the motion is now before us, what you see up here, so I think we're to the point now where we will comments on the motion. Once we hear from the board members, we have a few people signed up for public comment that we want to hear from. We'll hear a report from the advisory panel, and then we'll consider the motion. Tom Fote.

MR. FOTE: As I was just pointing out before we moved to the addendum, when I look at – I mean, an example is Jersey Coast runs a fluke tournament, and the fluke tournament used to have a thousand boats on it. It runs in May into June. When we look at it and we look at the history in the last couple of years, the history has been where the number of participants in the fluke tournament has gone down dramatically. Well, some of it has to do with economics, but a lot of it collates that when you raised the size limit on summer flounder, we start seeing the steady decline in the number of participants because the catch-and-release was like 40 to 1 and 30 to 1.

What we saw in the last three years – there was never a striped bass tournament during that period of time in June when we had the fluke tournament. Last year we ran into five of our member clubs that belong to Jersey Coast that were running striped bass tournaments because that was the only thing people were actually out there catching to eat in New Jersey.

That is what I was talking about the way people treat the fishery different than it did the last eight years. I also look at the fact that we're dealing with a species that is not being overfished and overfishing is not taking place, and the targets are not on line. Yet when I'm dealing with summer flounder, scup, black sea bass and a couple of other species, that even though they're rebuilt we're not allowing fishermen to basically harvest it, and we're pushing them over to basically direct to striped bass instead.

You know, I think a solution to this problem is to release the restraints on summer flounder, scup and black sea bass and stop treating them as overfished

stocks when they're not overfished except I guess now according to a now revised stock assessment, which I have to look at and we'll find out something about this afternoon – but that is more of what will happen because as soon as you allow the people to go fish for the stocks they really want to take home to eat and get off striped bass, you're going to reduce a lot of that pressure on the bigger fish because they're available there, so you reduce the mortality in the first place.

Also, if I'm asking for a relax on regulations like that and striped bass is in a better situation than those species, how can I be a hypocrite and go out to my public in New Jersey and basically say, oh, by the way, we've been doing so great with striped bass and there really is no – we haven't hit any of the triggers and now I'm going to reduce your catch by 40 percent.

No, I don't see that with my fishermen basically approving it. You know, I know what I get by e-mails, but e-mails, you know, come from the United Kingdom, come from places that are not basically striped bass fishermen, but they got the cause and they think of preservation instead of conservation. That's my concern here. Thank you for your time.

MR. GILMORE: Mr. Chairman, pretty much along the same lines and going back to Jaime's comments, I think he summarized it pretty well. We have a healthy fishery, a healthy stock, and I'm in agreement that we're in a green light fishery right now. We have an FMP where we've built two triggers into it. We have a threshold on abundance for spawning stock biomass. We also have recruitment indices. Those triggers have been hit.

I think what is going on right now is something out of a compensatory mechanism. We have density-independent and dependent factors happening right now, and I think the fishery is just adjusting to that. If we take action now of the magnitude that was recommended in this addendum, we are overmanaging this fishery and that's one of the things we've got to start getting away from. From anything I've seen and read in all the reports, I think the fishery is in good shape and we really need to do nothing at this point. Thank you.

MR. O'CONNELL: Mr. Chairman, just a point of clarification. Under the last presentation when we were looking at those female SSB projections through 2017, I thought what I heard was that we would exceed the threshold of female SSB, but in

fact isn't that the target level. Rather than the threshold, isn't the target –

MR. NELSON: No, that's the threshold; it's the 1995 SSB estimate as the threshold.

MR. O'CONNELL: I thought the threshold stated in the addendum was 30,000?

MR. NELSON: Yes, but we adjust it every year because of the stock assessment, so it's like 36,000 metric tons. The target is actually 120 percent of the threshold.

MR. O'CONNELL: Okay, thanks. Another question is I agree with Jim and Tom and I would ask that if this addendum does go forward that the board consider a couple of changes; one, that the implement date changes from 2012 to a year later than that. We have our charterboat fishery and the recreational fishery that will be beginning around April, and I know a lot of the trips have already been booked, and that would be a pretty significant impact to those charterboat industry captains.

Also, I think we should reflect back on what the purpose statement is. If the purpose is to reduce fishing mortality to stay within the reference points, I don't think we need to be looking at the level of reductions that are proposed in this addendum. If the objective is to address the New England states issue of the lack of fish, then that should be stated more clearly because that's really a reallocation issue versus reducing fishing mortality to stay within the reference points.

MR. STOCKWELL: Mr. Chair, I continue to support moving to approve the addendum for public comment. I've been hearing a lot of good news today, but frankly I don't hear any good news from the northern Gulf of Maine. A number of our charterboat businesses have gone out of business. Our recreational fishermen are not finding the fish.

The high JAIs to me don't translate directly into a good future fishery. I point to the shrimp assessment and for those of you here in New England the most recent cod assessment. I listened and read the comments of a number of anglers up and down the coast whose businesses and way of life have been profoundly changed.

My question to Gary this morning resulted in an answer that a contracting abundance may be because the stock is getting smaller. I agree with Jaime that we're going from green to yellow, but I think we're

flashing yellow. It's the time for action in some manner.

MR. R. WHITE: Mr. Chairman, I agree with Terry in relation to Pat's black and white. The black and white in this report is in the eyes of the beholder, and I see some caution. If there is a reasonable possibility that we will be overfishing in 2017 and 2018, I would much rather take a baby step now than take some drastic action then. Whether we need the 40 percent or not, I'm not sure, but doing something at this point to slow down the mortality on a spawning stock biomass I think is important. I always support sending out and getting public input whether we're going to take the next step or not, so I strongly support sending this to the public and getting their feedback. Thank you.

MR. GROUT: Mr. Chairman, I have, first of all, a question concerning the target and the threshold here because what is written in the document here says that the threshold is 30,000 metric tons, but clearly the graphs that came out of the assessment are saying it's somewhere around 36,000 or 37,000. Do you know what the target is right now?

MR. NELSON: 120 percent of 36 – I have to pull out a calculator.

MR. GROUT: On the graph here in the document it looks like it's somewhere around 46,000 metric tons; just guessing.

MR. NELSON: Again, I've got to get calculator.

MR. GROUT: But it's clearly if we can make that change in the document, if we're going to move forward with that, Kate, that we have the most current target and reference point. My comment on whether we need action here, clearly we're seeing a decline in the SSB. We also have some indication of some very good recruitment that's going to start showing up in the fishery in two or three years, but what we're looking at is under a low recruitment scenario there is a projection that by 2017 we're going to be in that overfished condition.

That is the line in the sand. It's not going below the target; it's going below our established threshold here. Even under average recruitment, which includes the good years, we're going to be right at that threshold by that time. The question to me here is do we want to get out ahead of this and prevent this from occurring and help us achieve our vision of healthy and sustainable stocks by 2015 or do we want to wait and react?

When we hit that threshold, our management plan calls for the board must adjust the striped bass management program to rebuild the biomass above target. We can either take a small step right now, and it looks like something as small as a reduction by 13 percent would prevent us from ever getting to that overfished condition or we can wait until that occurs and take action then.

I would hope that this board would continue to accept this motion that was put up by Terry and myself to bring it to public hearing and not put something in that we need a 40 percent reduction; adjust it so that we're looking at maybe a 13 percent reduction, because clearly I don't think we need that kind of reduction right now. I would hope the board would consider this motion and send it out to public hearing with a target reduction of about 13 percent.

DR. DUVAL: Mr. Chairman, I agree with some of the comments that have been made by Tom O'Connell and Jim Gilmore. I definitely appreciate the concern and the desire to be precautionary so that we don't hit any of our management targets that absolutely require us to take action.

Doug referenced this a little bit and Wilson also made some remarks in this regard, but I'd feel a little more comfortable sending something out to public comment if we were focused on just a couple of actions right now. I feel like even though all the measures that are proposed in the addendum are allowable under adaptive management and can go forward through an addendum process, it would be such a drastic change in management that I feel that is more appropriate for a full amendment process, but that's just me.

My second comment is that if this addendum does go forward, I will be making a motion to exclude any measures pertaining to the Albemarle-Roanoke from the addendum. I spoke to this at the last board meeting that we had. Just to remind folks, the Albemarle-Roanoke stock is managed separately. We have a North Carolina Estuarine Striped Bass Fishery Management Plan.

We are in the final stages of completing Amendment 1 to that plan. It has been sent to the Secretary of our Department of Natural Resources first review and then it will go to a legislative committee for review. I think it would be premature for the board to directly propose changes in management to Albemarle-Roanoke stock.

I think Bill Cole and Wilson Laney can speak to sort of the historical nature of this, but I'll just remind folks that from a policy perspective Section 5 of the Striped Bass Act required a study of the Albemarle-Roanoke stock, and the recommendation from that study by both the Fish and Wildlife Service, the state management agencies, the National Marine Fisheries Service was submitted in a 1992 report to congress.

It recommended that management remain with the state of North Carolina and that any changes to the management would come before this board for sort of a stamp of approval. It seems to me that if direct changes are going to be proposed by this board, that the more appropriate way to do that would be for the board to request that the technical committee review the management of the Albemarle-Roanoke stock and make a recommendation to the full board as to whether or not direct management of that stock is required by the board at this time.

Again, I think Dr. Laney and Bill Cole can also speak to that since I think Wilson wrote the report to congress and Bill edited it, but I will making that motion to exclude the Albemarle-Roanoke should this addendum move forward for public comment. Thank you.

CHAIRMAN TRAVELSTEAD: Thank you. Kelly, can you give us the AP report?

ADVISORY PANEL REPORT

MR. KELLY PLACE: Yes. We'll roll through this fast. The advisory panel was split several ways on most of the issues. Some wanted the addendum out to the public now with management action for the 2012 season. Others were fine with sending it out for action or potential action in 2013. Others didn't think it should go out at all and that the addendum wasn't needed.

The former cited issues like mycobacteriosis, decreased CPUE, unaccounted for discards, poaching, inadequate MRFSS data, inadequate Wave 1 offshore data, illegal EEZ catch impacts, predation factors, low young-of-the-year indicates and possible increase M in the Chesapeake as reasons for the northern recreational fishery decline and why action should be taken to reduce mortality now.

The second group saw less urgency and cited the stock assessment, 2011 young-of-the-year indices, improved enforcement, time constraints, money issues and lack of specificity of data implications for

the resource and management as reasons for 2013 action if necessary. The latter group cited issues such as the bad economy, adequate stock abundance, stable commercial landings, more pressing management issues, natural changes in distribution, mycobacteriosis scare tactics, multispecies considerations, and not tripping any of the triggers as reasons for the northern recreational problem and/or reasons for status quo.

The consensus that we did have were that Wave 1 data needs improvement, illegal catch in the EEZ as a serious threat to the spawning stock biomass – it's magnitude is unknown – and law enforcement has made great progress in this and other areas like poaching. Also, we felt that the 2011 data should be included in the document if possible, especially the new young-of-the-year indices and JAIs.

Lastly, I think one reason for the lack of consensus is that if you have an axe to grind or an agenda to push, these documents can be cherry-picked to support it. That's not necessarily bad, but it just means there are a lot of unanswered questions and unproven competing hypotheses contained within. If anyone wants me to answer any questions on any of those or other peripheral issues that we discussed, I'll be happy to do that. Thank you.

MR. AUGUSTINE: Good report, Kelly, but if I were asked to ask you again my black-and-white approach to what the advisory panel – was there a consensus in supporting moving the addendum in favor of or against; can you give me anything more than we're – I don't want to know the numbers, was it more than half the body, but did they lean toward do it or don't?

MR. PLACE: No, there probably weren't more than half of anything. Like I said, there was no consensus. There were basically three groups. Certainly there was one very ardent group that wanted to move it forward and wanted action taken in 2012 as well as sending it out for public comment.

The other group in the middle basically was fine with moving the document forward, but thought that action, if necessary, would be taken in 2013; like, in other words, you'd have it in your pocket if you need to take action. The last group – these are roughly equal – didn't think the addendum was necessary to begin with and that the document shouldn't go out for public comment. There was no real consensus; there were pretty much even splits.

MR. AUGUSTINE: Okay, and the follow-on question then, could you give us an idea what the

makeup of the advisory panel is; is it 17 recreational and 2 commercial or 17 commercial and 2 recreational or six of these and six of those?

MR. PLACE: Actually on our October 3rd conference call there was only one person representing commercial. That was Arnold Leo from your state. It was predominantly recreational. There was a charterboat representative. Technically I'm supposed to be Virginia's commercial representative, but I haven't been voting or advocating for any position since I have been chair, so there was really only one commercial representative that was attending.

MR. AUGUSTINE: Thank you, and a follow-on to that, thank you, Arnold Leo, for making yourself available from New York. I'd like to make a substitute motion when you're ready, Mr. Chairman.

CHAIRMAN TRAVELSTEAD: Go ahead.

MR. AUGUSTINE: All right, based on the comments around the table and where we're going and what the implication is for that motion that is up there, **I would move to substitute to postpone further action on this addendum until the completion of the next benchmark stock assessment.** If we want to put in a date, I would suggest we put it in. Then I'd like to talk to the motion, Mr. Chairman.

CHAIRMAN TRAVELSTEAD: Is there a second to the motion? Seconded by Mike Johnson. Go ahead, Pat.

MR. AUGUSTINE: Now with all due respect to those folks who are not seeing large striped bass or many of them in their backyards, no matter what action we take today it's not going to take the large striped bass from Montauk Point and move them up to New Hampshire or to Massachusetts or anywhere else.

Please recall each state has conservation equivalency. If you want to have a window that says that you can catch fish 20 – whatever the minimum is – to 60 inches, it's on you; and to overlay it on everyone else who is not experiencing the same situation at this point in time with the report we have from the stock assessment committee and the technical committee and the direction they're suggesting we go – well, they haven't said go there.

They're saying you don't have a need to. Should we be aware of the possibility of a crash and a problem?

Yes. Amendment 6 gives you two major triggers. We haven't hit either one of them to meet that action yet. I'm convinced that the minute we start tinkering with our minimum size and maximum size right now, we're going to offload more pressure on the stocks that we presently have that we're managing very poorly.

We know they start with winter flounder, weakfish, lobster. I shudder when I think of putting a five-year moratorium on our lobstermen who we'd literally put out of business. Whether it's a habitat condition or not, we're managing fishermen, we're affecting livelihoods. Yes, I understand there is a tremendous amount of money driving the economy by partyboats and charterboats going out and fishing on these fish.

We've created a bonanza for folks who have a vessel who have got a captain's license, but how of you are taking three striped bass trips a day? We have charterboat guys in New York that take three a day with six guys on each vessel. And, oh, by the way, they can take two greater than 28. Read the fishermen magazine in your backyard and tell me that you don't see what the implications are.

The minimum size typically is 28 inches. What did the heck did we expect to happen? You've got all the states fishing greater than 28 except those that have made changes where they allow for a third fish or a slot-size fish, but the reality is that's what you're fishing for. You're fishing for eight-year-old fish and older. Wake up and smell the trees – the roses.

So this is what we have created; and if you're not seeing large striped bass in your backyard, guess what, they're migratory. They travel up and down the coast. Likewise, I think – and I'm not trying to preach, but what I'm saying is these are the facts. We have tautog in trouble. So, look at those species of fish that are going to be further impacted by changing our fishing – I won't say habits, but impact on those species of fish that we're managing as single-species management and allowing to grow at a level that they typically are eating something down the food chain.

We've wrestled with this all these years trying to bring every species up to that range above the threshold, get them in that range, make them in the green zone. We can't do it; it has been proven we can't do it. But to protect one of the larger predators – whether it's bluefish or whatever it happens to be, Mr. Fote was right on target, we've got to look at summer flounder. What are we doing to ourselves?

Porgies, what are we doing to ourselves? They are eating food that is in the food chain for other species. I think when we talk about basically setting aside or ignoring or taking precautionary action on any single specie of fish we are not doing our job. We're coming to the table to nod our head, to agree with our constituents and sometimes we must agree with the constituents because they've read the science and they know what they're talking about.

But to drive our decisions based on emotions is not managing, and so therefore I feel very comfortable in doing this. If there is an aberration in the stock and the myco goes forward and destroys the population in the Chesapeake, we've got an issue. There will be a trigger and we will take action, but I think we've got to be realistic in goals and desires to protect the most protected specie of fish in the ocean that we many; and to do it at the demise of other species of fish that are also costing livelihoods and having a negative economic impact in several states along the coast, shame on us. Thank you for bearing with me on that, Mr. Chairman.

CHAIRMAN TRAVELSTEAD: I have 43 names on the list to speak and there are only 39 of you around the table. We have been talking about this for two meetings now, and I think everyone has developed a pretty solid opinion of how they're going to vote on this. I'm really not sure that further debate is going to change anyone's mind.

I don't like cutting people off, but we're already into the timeframe for the next agenda item, and we still have to hear from the public. What I'd like to do is suspend comments from the board and just very briefly hear from the public; and then if someone has an urgent comment they have to make, we'll hear from them and then we'll vote. Could I see a show of hands from the public as to who wishes to speak? Okay, you're going to have to limit your comments to less than a minute. We'll start on this side of the room and we'll move this way, but please I'm going to cut your mike off if you go beyond a minute.

MR. EOIN BEIRNE: My name is Eoin Beirne. The issue before the board is whether to send an addendum that considers some amount of mortality reduction out for the public comment. To me it seems imperative that the millions of stakeholders and millions of members of the public who have a stake in this be given some opportunity to provide feedback on the existing management plan and how it has worked, its effectiveness and the effect it has had on them.

The public should be given a chance to say something about their particular area where they fish, perhaps an area that they've fished for decades and the changes they've seen in that time. That perspective also should be considered in addition to the peer-reviewed stock assessment data that you all have and that Mr. Nelson provided.

You should hear tackle shop owners and boat dealers and hotel and restaurant owners, charterboat captains, people who rely on a healthy population of striped bass to make their living. You should also hear from the commercial fisherman who take these fish and who will argue that there is nothing wrong and that nothing needs to be done. These are all perspectives that should be heard and should be considered in addition to this body count data that you have. Thank you.

MR. DARREN SALETTA: My name is Darren Saletta. I represent the Massachusetts Commercial Striped Bass Association. We've seen phenomenal fishing in the past four or five years. This year we made our quota in an extremely short season; 14 full fishing days plus 4 Sundays of five fish.

I'm also a charter captain and a significant number of our members are charterboat captains, so we have a significant and vested interest in the health of the recreational fishery. At this point we have seen extraordinarily high populations of striped bass both in the state waters and since that is such a short season a number of us participate in fisheries such as lobster, tuna, groundfish fisheries involved in federal waters where we're seeing an extraordinary and mind-boggling populations of striped bass in the offshore waters following the food.

Recreational fishing, I have seen some decline and we believe this is in part due to economic factors, the price of fuel, for example. Also, in addition to that is shore fishing, which is being significantly impacted currently by an extraordinarily growing population of gray seals that has in fact made it illegal to fish from the shore from certain locations such as beaches in Nantucket.

At this point we have reached none of the triggers for management and we believe that it would be the responsible decision of the committee to not move on any changes to this management scheme and hold off until the 2013 stock assessment. Thank you very much.

MR. JAY MCGOWAN: My name is Jay McGowan. I'm from Harpswell, Maine. I'm a charter captain up

there and have been for about 25 years. When I see these things on the board up here, the scales and stuff, it shows to me that we're on a slippery slope. There is no way of looking at this and not seeing that it's going down. We haven't hit the triggers yet but we're going to.

I agree with the man that says instead of trying to wait until we've hit the overfishing trigger, that maybe we ought to take some small steps now to prevent that trigger ever being met and to keep viable fishing for everybody. For this man over here that spoke about people wanting to find big fish in their backyard, that's the problem. All we have in Maine is big fish.

This entire season I caught three fish under 28 inches of all the fish I caught. Everything else was 33 and 38 inches in size. This shows me that we do not have a good biomass of younger fish coming along. That shows that something is happening to the younger fish. They're being caught, they're dying on their own from some disease, but something is happening and it's not necessarily overfishing.

CHAIRMAN TRAVELSTEAD: Thank you, sir, for your comments.

MR. MCGOWAN: Can I make just one more statement? The division between recreational fishermen and commercial fishermen should not be there. Anybody that makes their living out of the water is commercial whether it's the guy selling his fish or the guy taking people out to catch fish. Thank you very much.

MR. KALIL BOGH DAN: Thank you and I'll be brief. My name is Captain Kalil Boghdan, and I am an ORVIS-endorsed fly fishing guide. My guiding waters in Massachusetts include the Essex River, Crane Beach, Plum Island Sound and other waters on Ipswich Bay. I have been in operation for 15 years or so.

My anglers come from around the country and abroad to fish with me. I have an economic interest in this matter and so do other operations, local tackle shops, hotels, restaurants and tourist shops. The recreational impact is very important to the economy. It's important to all of us. I feel it is very important that this addendum be brought to the public for them to be allowed to speak regarding it. It really is important. We've hear a lot of things about the large bass. Since 2007 most of my fish have been 28 inches and over with very few fish in the teens as previous to 2007. Thank you.

MR. JONATHAN JOYAL: My name is Captain Jonathan Joyal. I spend five months on the water everyday and I understand people's concern about the fish. It would seem to me you either believe the science or you don't. When we accept the science, that's kind of the black-and-white thing to me. It's easy to go out and not catch a fish and think, oh, my word, there's no fish here.

I either accept the science or I don't. The tape measure doesn't lie if we accept the science. My question is, is there any science on the increase in the gray seal population in the upper New England states and how that is affecting the fishery? What I've personally noticed is not that there is less fish. I'm catching short fish, I'm catching big fish.

I released 52 short fish on the first day of commercial striper season. You can't tell me there aren't small fish. My question is, is there any science about the seal population affecting where the fish are? I used to catch these fish in eight feet of water. I'm catching them in sixty feet of water now. How is that affecting the guy from the shore? I know what it's like to fish from the shore. I know what it's like to fish from a boat. The fish have moved in my experience offshore, and I hope you'll consider that and looking into the rest of the science before you take any kind of action. Thank you.

MR. KEN HASTINGS: My name is Ken Hastings and I'm a Maryland recreational angler. I urge you to vote against the substitute motion because I don't think your data base is going to change significantly by the time you get around to the next benchmark assessment, anyway. We've had a very candid discussion here today about the things that are wrong with the data that goes into the stock assessment, and there is not a lot that you can do about that except to be cautious.

By the next time you're not going to have a better handle on underreporting. Poaching isn't even mentioned in your stock assessment document. I did a word search on it and I can't find the word "poaching" so you didn't even consider that, and who knows what is going to happen with myco. I would urge you to vote against the substitute motion and instead go back to the original motion. Thank you.

CHAIRMAN TRAVELSTEAD: How many do we have left who wish to speak?

MR. ARNOLD LEO: I'll gladly be the last. (Laughter) That's Arnold Leo; I'm here on behalf of the East Hampton Baymen's Association. You

know, it's like going down a rabbit hole. Here we have – you know, we're 168 percent above the threshold, and it certainly is a healthy stock and why are we talking about changing management at that point?

Moreover, we have a benchmark stock assessment in 2013. Well, that would be at least three years ahead of this 2017 Doomsday Scenario. We'd have plenty of time to change management before 2017. The other point I want to make is that I'm not sure it has been mentioned yet that, you know, high, very high abundance, you know, record levels like in 2004 cannot be used as the standard for what is a healthy fishery.

In fact, a dominant species such as striped bass has been for some time seems to lead to a couple of real problems. One is when that stock was way up high in 2004, 2005 and 2006, the discard mortality of the recreational fishery was at its highest. I know because I have been out with my sports friends. You begin to catch fish and you keep the first keepers and then you go on fishing and you catch a bigger one and you throw the other ones overboard, and it goes on like that.

So, very abundance seems to lead to the evil of discard mortality being on the rise, and it has also been mentioned the dominant species such as striped bass is right now has a very detrimental effect on other species. Weakfish, winter flounder, river herring, eels are among those. Thank you.

MR. JACOB FREEMAN: My name is Jacob Freeman. I'm the president of Stripercoast Surfcasters Club and administrator of stripers 24/7.com with almost 20,000 members. As recreational fishermen I think it behooves the board to at least allow us a voice, give the people an opportunity to present feedback on this. Whether you make a motion or not, I think we deserve to be heard. Thank you.

MR. DOUG JOWETT: My name is Captain Doug Jowett from Maine. I wish I had more time to speak because I have a lot to say, but I want to limit it to one issue, which will be the socio-economic impact in the state of Maine so far. We've had a lot of tackle shops go out of business in the last couple of years.

On the once famed Kennebec River, seven tackle stores have gone out of business. The Kennebec Angler on the banks of the Kennebec is closed. The Channel Pond Outfitters at the head of tide on the Androscoggin River in Brunswick is closed.

Mountain Valley Sports on the banks of the Kennebec in Solon is closed. The Sportsmen's Bar on the banks of the Kennebec in Gardiner is closed. Fly Fishing Only on the banks of the Kennebec River in Fairfield is closed. The Kennebec River Outfitters in Madison on the banks of the Kennebec is closed.

One other shop, one of the best in the state of Maine, is for sale. It has been trying to sell it for four years and now only open three or four months out of the year. As mentioned previously by one of our commissioners, a lot of our guides have gone out of business. That's the impact in Maine, just a small part of the impact that a shrinking biomass is having on the economics for the state of Maine. I wish I had more time because I have plenty to say, but I will limit my statement. Thank you.

MR. LEO MAR: My name is Leo Mar and I am a commercial fisherman. I make my living on the water. I'm pretty much there year round. What I'd like to say is I see it as a green light fishery. I would like to ask everybody to take in effect that let science dictate what you guys decide and not emotions.

If you don't listen to science I think and you open it up to the public, you're going down a slippery slope there, to steal some other people's words, because we're far outnumbered. The emotions and the gentleman behind me with the ORVIS and the 20,000 members, there are a lot of people out there that they can get up here and put in front of you and maybe twist things.

I agree with the science. Everything I see on the water says that it's fantastic fishing out there. To address the gentleman who just spoke behind me, I live in Chatham; and as everybody knows, we closed the commercial fishery very quickly. All the fish pretty much in New England were commercially caught, the majority of them Chatham waters. Chatham Bait and Tackle went out of business this year. I think that maybe a big part of what he has with the charter captains and the bait tackle, it's not the fishery. The fish are healthy; you guys know that. It more has to do with the economy. Thank you.

MR. DEAN CLARK: My name is Dean Clark. First of all, I'd like to comment on the science part of this, and that is a friend of mine, a senior scientist at the Woods Hole Oceanographic Institute, has said that fishery science truly does not meet the qualifications of being a science at all but rather a best-guess scenario. It's incomplete and it's uncertain.

For that reason and the fact that more three million folks fish for striped bass according to NOAA, the many billion dollar economy that they generate – in fact, it's more than a million right here in Massachusetts alone – this is 100 percent dependent on there being more and not fewer bass. And by your own numbers shown today, it shows a definite trend and a species decline.

I implore you to bring this amendment to the public and not the substitute motion, but the original. Three million anglers should not be silenced or ignored. To do so would not only be wrong, it would be foolhardy from a public relations perspective. Thank you.

CHAIRMAN TRAVELSTEAD: Vito, you're going to have to be the last speaker. We're going to have to make some decisions here.

MR. VITO CALOMO: Mr. Chairman, it is very nice to allow the public to speak here today. Mr. Chairman, in this economy we have real big problems; and allowing people to fish, whether it be commercial or recreational, doesn't mean anything to me. I just look at the jobs. The jobs are needed real bad in the history of my lifetime as they are today. The green light, red light, yellow light, right now fishing is still good. They're seeing plenty of fish. The science is positive and not negative.

Erring on the side of caution in times that are good and the economy, I would say maybe that's the way to go. At this time I think we need to continue fishing. Mr. Chairman, I represent U.S. Senator Scott Brown and he is all about jobs and keeping the economy going and helping the fishing industry.

As you know, Mr. Chairman, I served on this commission and of all the commissions and councils that I have served, this is by far the best body that I have worked with. Mr. Chairman, I don't believe the Atlantic States Marine Fisheries Commission should lose sight of their position. They should revert back to where they came from, their history of making decisions that were for the good of the fishing and the fishermen.

Again, I go back to many places as far as being on commissions and councils, and again I praise this commission, and I'm sure you'll make the right moves. Bringing it out to public is a good move. There are many, many people that enjoy fishing; and speaking from the Commonwealth of Massachusetts as the lead person for Senator Scott Brown, I think that may be a good idea. Thank you, Mr. Chairman, for your time.

CHAIRMAN TRAVELSTEAD: Dennis, you had a comment? Go ahead.

MR. DENNIS ABBOTT: Mr. Chairman, having been a legislator I can read the tea leaves around the room and I can probably guess how the vote will go. I'm also of a mind that we should be aware that we have a canary in the mind that's probably going to fall off its perch pretty soon. It's also interesting to me the same people sitting around the room today praising the science, the science is showing us all this good information to support their position.

Yesterday the same people sat around the room in lobsters and had the science telling them that we should have a moratorium in Southern New England; and what do we do? We disbelieved the science that is offered to us in this instance, and we have done that in that case for ten years. My prediction is that probably within two years the same scientists will be back in front of you after they do the benchmark assessment giving you information, that the same people who believed the science today probably won't be believing the science when we're in such a dire situation.

As a board we do work hard together to try to do something positively, but we generally always come together and work better when we're in a reactive mode. We should take some action, but whether we do or not is determined by the outcome of a vote, but what I would like to do is ask the maker of the substitute motion, my friend, Mr. Augustine, if he'd withdraw that motion and just allow an up-or-down vote on the first motion.

The second motion says we're not going to take any action until the completion of the next benchmark stock assessment, which is going to be more than two years from now. I don't think we should preclude ourselves from taking any action at the next board meeting or the board meeting after that if it's so necessary, but I don't think that we should draw a line in the sand that says we probably won't be taking any action in probably closer to three years, if anything – beginning any action.

I think in all fairness why don't we vote up or down on the original motion and be over and done with it. As I said, I can read the tea leaves and judge probably the outcome of the vote, and I can live with that because that's the democratic process. My question or plea to you, Mr. Augustine, is would you consider withdrawing that motion and voting on the first motion?

MR. AUGUSTINE: The short answer is no and the long answer is no, and a brief reason would simply be –

CHAIRMAN TRAVELSTEAD: Thank you, Pat, that’s good, we’ve got it. Jaime.

DR. GEIGER: Mr. Chairman, again, I certainly appreciate all the comments there have been around the table. I do want to mention that I’ve heard comments that if we postpone this further nothing is going to get done from 2013. With all due respect, Mr. Chairman, I respectfully disagree with that statement.

I think the things that we do for American shad, river herring, menhaden and a variety of other forage fish species around this commission will serve us well. In those producer areas, what those producer area states can do to reduce TNDLs and improve water quality, that can be done. For monitoring freshwater inflow to estuaries, that can be done.

To look hard at hydrofracking and environmental contaminants, that can be done. There are a lot of things that this commission can do in habitat restoration, environmental contaminants, water quality and a whole variety of other issues that are certainly within the purview of this commission. I would urge the commission to look at these issues seriously. Mr. Chairman, there are abundant things that we can do before 2013. Thank you very much.

CHAIRMAN TRAVELSTEAD: Do the states need a moment to caucus? We’re going to take a minute to caucus and then we’ll come back and vote. Okay, five-minute break.

(Whereupon, a recess was taken.)

CHAIRMAN TRAVELSTEAD: Okay, folks, let’s come back to the table. There being no further comments, we are voting on the substitute motion to postpone further action on this addendum until completion of the next benchmark stock assessment. Was there a request for a roll call?

MR. R. WHITE: Roll call, please.

CHAIRMAN TRAVELSTEAD: Staff will call the roll.

MS. TAYLOR: Maine.

MAINE: No.

MS. TAYLOR: New Hampshire.

NEW HAMPSHIRE: No.

MS. TAYLOR: Massachusetts.

MASSACHUSETTS: Yes.

MS. TAYLOR: Rhode Island.

RHODE ISLAND: No.

MS. TAYLOR: Connecticut.

CONNECTICUT: No.

MS. TAYLOR: New York.

NEW YORK: Yes.

MS. TAYLOR: New Jersey.

NEW JERSEY: Yes.

MS. TAYLOR: Pennsylvania.

PENNSYLVANIA: No.

MS. TAYLOR: Delaware.

DELAWARE: No.

MS. TAYLOR: Maryland.

MARYLAND: Yes.

MS. TAYLOR: D.C. (No response) PRFC.

POTOMAC RIVER FISHERIES COMMISSION: Yes.

MS. TAYLOR: Virginia.

VIRGINIA: Yes.

MS. TAYLOR: North Carolina.

NORTH CAROLINA: Yes.

MS. TAYLOR: U.S. Fish and Wildlife Service.

U.S. FISH AND WILDLIFE SERVICE: Yes.

MS. TAYLOR: National Marine Fisheries Service.

NATIONAL MARINE FISHERIES SERVICE: Yes.

CHAIRMAN TRAVELSTEAD: **The motion carries nine to six.**

DR. GEIGER: Mr. Chairman, a clarification. Certainly, the original motion made by Doug Grout can be brought up by this Striped Bass Board at any time for any purpose at any subsequent meeting; is that not correct, Mr. Chairman?

CHAIRMAN TRAVELSTEAD: Yes. That makes the substitute motion now the main motion, correct? So we need another vote as the main motion. Do we need a roll call for that? All those in favor of the motion as the main motion please raise your hand; opposed same sign; null votes; abstentions. The motion carries. We are going to move on real quickly to the Law Enforcement Report, Kurt.

LAW ENFORCEMENT REPORT

MR. KURT BLANCHARD: The Law Enforcement Report today is going to be a presentation from members of the Interstate Watershed Task Force Investigation Team that conducted a multi-year investigation in the Virginia/Maryland/Potomac River/Chesapeake Bay Area over a period of time. The presenter is going to be Special Agent Ken Andrus from the U.S. Fish and Wildlife Service; Sergeant Jack Bailey from the Maryland Natural Resource Police and Wayne Hettenbach from the United States Department of Justice. I would like to ask them to come up do their presentation. Thank you.

MR. WAYNE HETTENBACH: Good morning. First, let me thank the members of the board for inviting us to come and present this case before you today. My name is Wayne Hettenbach. I'm a senior trial attorney with the United States Department of Justice. I was the lead prosecutor in the various cases that came out of the Interstate Watershed Task Force. I'm also presenting Special Agent Ken Andrus who is a special agent with the U.S. Fish and Wildlife Service and Jack Bailey who is a sergeant with the Maryland Department of Natural Resources Police.

The Interstate Watershed Task Force began roughly in 2003 and it was a serious of cases focusing on the Chesapeake Bay striped bass illegal commercial fishing. The case technically continues today. The last of the defendants to trial, which was a five-week trial, is up on appeal to the United States Fourth Circuit Court of Appeals.

The oral argument is actually going to be heard on pieces of that in December and a decision will

probably not be reached for three to five months after that. So a case that began in 2003 still continues to this day although the active investigation and active prosecution of cases arising from that case has been completed.

I'm going to try to move through a lot of this very quickly and try to leave some time for questions at the end. The way this case developed was that intelligence indicated certain things about the commercial harvest of striped bass in the Chesapeake Bay. There were numerous incidents of small-scale commercial violations that Maryland and Virginia were seeing on a regular basis, coupled with small fines and weak penalties and lax judicial enforcement that the states were not seeing deterrence and were seeing an increasing number of small-scale penalties, but making any one of these cases into something more than a few untagged fish or a few fish here and there was beyond any individual state's ability to do.

There was a limited amount of manpower. You're all familiar with the manpower limitations I'm sure you all face in your states everyday. In the Chesapeake Bay – and I'll show you a brief map – there were three regulatory jurisdictions that were in very close proximity to another where you had license holders holding multiple licenses in multiple jurisdictions.

There were indications, based upon observed officer interactions, that there may be cross-jurisdictional fishing going on that was making it difficult to investigate cases, and finally we have the historic vulnerability of the population of the striped bass. You all are very familiar with the moratoriums that have been in place in the Chesapeake Bay for a period of time.

Seventy to ninety percent of the entire east coast stock of striped bass comes or are spawned from the Chesapeake Bay. Those factors all led the United States Fish and Wildlife Service to help form this task force with their state partners. This is a map of the Chesapeake Bay and the Potomac River. The names and arrows indicate the locations of those that became defendants in this case. The case was focused on the western shore of the Chesapeake Bay and the Potomac River.

There were companies that were buying striped bass in Washington, D.C., from both Maryland and Virginia. There was a Maryland company that was both a check station and a commercial fish wholesaler. The individuals were individual fishermen involved in the commercial fishing. Two main schemes developed that were revealed as part of

the investigation, and the schemes varied slightly depending on which jurisdiction the fishermen came from and where they were selling their catch.

The first scheme with the Virginia fishermen would occur primarily during the peak spring spawning and migration period in the Potomac River and Chesapeake Bay. That was the time period when the Maryland jurisdiction would close its fishery completely. The PRFC, which was the body that regulated the main stem of the Potomac River, would close its fishing completely.

Virginia would have fishing open in its tributaries of the Potomac River but institute a slot size with a maximum limit of 28 inches per fish. What the Virginia fishermen did was they would cross into the PRFC and fish in those waters, harvesting the large migratory spawning stock. They would also target large oversized fish by utilizing gill nets of a larger size than was allowed by law.

That would allow them to take fish massively over the slot limit, and we're not talking a 30-inch fish and a 28-inch limit. We talking 40 and 50 and higher inch fish over the slot limit during the spawning season, during that protected timeframe. They had commercial outlets that were willing to buy their fish untagged, so that gave them an outlet of where they were able to sell.

They had commercial outlets that were willing to knowingly buy the fish that was oversized. Because of the varying overlapping regulations and differing regulations and different jurisdictions, the fish houses were plausibly able to say in some instances we can't possibly know where this fish is coming from so we'll buy it. That became an issue in the five-week trial of one of the fish houses.

The Maryland fishermen because of a different regulatory system had developed different schemes. Because the Maryland system – and I'll talk about this – used to provide unlimited tags for the striped bass that were commercially caught. They used the poundage quota system and provided tags, but there were no dates on the tags since about 2000.

There were no dates on the tags and while the tags were supposed to be single-season-used tags, Maryland did not require the commercial fishermen to return the tags at the end of the season. They also would issue virtually unlimited numbers of tags to the commercial fishermen if the fishermen could demonstrate that they had run out of tags but not yet met their poundage quota.

So what that meant was that Maryland fishermen would go fish in the PRFC and selectively tag larger fish with PRFC tags. Because the PRFC had a set number of tag system, so the commercial fishermen, when they would catch a small fish in the PRFC, they would put a Maryland tag in it; and when they'd catch a big fish, they put a PRFC tag in it, allowing them to maximize their poundage per tag in the PRFC; but because they had unlimited Maryland tags, it didn't matter how many of the small fish they tagged.

Then the second part of the Maryland scheme was that the fishermen would – Maryland used a check-in station system, and I'm going to show you that in a minute. The fishermen would inflate on their check-in the number of fish that they were checking in and often either then just not report poundage or decreased the amount of pounds.

What that creates is that they then have a card; and if they could bring this card to Maryland Department of Natural Resources and how that they had used up all their tags that they had been issued but yet still had poundage quota, Maryland would issue them more tags, and then they would use those tags, put those on fish and keep going.

That had an interesting effect and when we analyzed the data was that it made it look like the fishermen were catching smaller and smaller fish when we looked at the numbers. By increasing the numbers and decreasing the poundage, it makes your fish look smaller and smaller and that became significant in our ability to make this a much larger case than a few fish here and a few fish there.

And the wholesalers, as I mentioned, created false records to help the fishermen conceal this activity. We had commercial wholesalers that would change the species identified on the receipts, manipulate the poundage and price per pounds. It was sophisticated enough where they would change the species half the price and double the weight and the receipt given to the fishermen; so that if a uniformed inspector or if a Maryland officer went to inspect those receipts, it would look right.

But if you saw a receipt for perch too much, they were afraid that they would get caught. Those were some of the schemes that were involved, and then the check-in stations would knowingly falsely countersign check-ins because the check-ins were done by commercial establishments that had an interest in the fishing. The more fish that were brought, the more they could sell so the commercial

establishments were willing to help the fishermen engage in this overfishing and buy that illegal fish.

As I mentioned, these were some of the major loopholes exploited by the Maryland fishermen. The tags didn't change in appearance – that was the other problem – from year to year. Even if you had an objectively honest wholesaler, there would be no way for them to know whether a tag used on a fish in a particular year was in fact tagged validly.

No year on the tag; the unused tag is not required to be turned in; and there was no correlation between the number of tags given and the actual poundage quota which the fisherman had, and that is what led to the ability of the fishermen to engage in these practices, so we had a tagged fish that wasn't a legal fish.

In the investigation what we found was that 25 to 50 percent of the Maryland tagged fish were actually illegally harvested in one manner or another. When we spoke to the fishermen and when they cooperated with this, they would say it was 50 percent and upwards of amount reported versus amount that was actually being harvested, so a substantial overharvest by a large number of individuals.

And then if the fish were not checked in, they just simply wouldn't towards the quota. This is the system that I described. You see here, this is a Maryland check station card, and so these were what the fishermen were required to put – you see they have to put the number of fish, the pounds for that check-in, and then the next column is a running reverse tabulation from their quota down to what they have, the check station number and the counter signature by the check station.

So if the fishermen used up all their tags or simply needed more tags, they would simply show this card to the Maryland DNR and say, "Here, I didn't catch all my quota. Here are all the tags I used; give me more tags," and they would get them. What that led to is we were able to quantify both for purposes of sentencing and for purposes of proving the underlying case what was happening.

The reason we were able to do that in Maryland is because the first column here in this chart is the year, obviously. The second column is the average weight of a striped bass. Maryland would go out each season and conduct a scientifically valid sampling of striped bass in the Chesapeake Bay and they would then find the average weight of a fish that should be caught based upon the scientists going out and doing

the fishing and catching the fish and coming up with the average weight.

Then if you look all the way to the right-hand side, the second column from the right, the average weight as reported, that's the average weight the fishermen reported on their cards. So when you took that number of fish divided by the total number of pounds, you were able to see a significant variation, what the scientists will call a biologically significant variation in the average weight per pound of the fish.

So with this we were able to show and were able to quantify the amount that was being overfished and the dollar value using at a five dollar per pound at the time is what we choose – it was probably actually higher but that was what we were able to easily justify and so we could show the poundage of overharvest in excess of – for one fisherman in this particular case – 10,000 pounds.

Some licenses we saw as many as 3,000 tags were being issued per license with a 4,000 pound quota attached to that license, so it was – I mean, there was just no correlation between those items, and this is what resulted. Okay, so what were the illegal methods that were documented in the course of the investigation? I mentioned some of these already.

Fishermen would go out and tag during the closed commercial season but be tagging with open season tags, and that was the result of a relationship of Virginia having a season that was open with a slot limit but neighboring jurisdictions being closed. Those fishermen would be out on the water and simply go into the closed jurisdictions, and it was very difficult to detect that cross-jurisdictional movement particularly with submerged gill nets.

Oversized take, overharvest of quota, we also discovered disguising the use of the gear that was used. One of the smaller schemes in Maryland was tags were issued by gear type and where you have commercial fishermen holding multiple gear type licenses; so a fisherman held both hook and line, for example, and a pound net quota, they were issued different tags.

But for the hook and line, for various reasons that Maryland chose to do, more tags were issued for the hook and line or the season was longer or different seasons for hook and line, and simply what the fishermen would do is they would fish the pound nets but yet tag the fish then with hook-and-line tags, and they would go so far as to make incisions. During the course of the investigation, some of our agents'

identities were figured out during the course of the investigation or some of the fishermen were very cautious in dealing with our undercover investigators, and they would actually score the fishes mark with a knife to make it look as it had been caught on hook and line.

They went to this level to conceal their catch. We had to send those fish for forensic analysis and we were able to determine that in fact those marks in the fishes mouth were not made with hook marks and yet they were tagged with hook-and-line gear. That was a method of illegal take that we documented.

And then there was the reuse of commercial tags and the use of expired tags. Some of the fishermen would either not fasten the tags securely or would alter the plastic tag in some way to allow them to once the fish house got the fish they would go and remove the tags and give them to the fishermen, and then they would be able to reuse those tags.

There fishermen using other fishermen's commercial tags; so if someone didn't finish they would sell their tags to another and that was prohibited by law. Again, these are some of the smaller illegal methods that were documented. The unmarked oversized gill nets targeting the breeding stock I have talked about, and then basically having untagged fish and having wholesalers willing to accept untagged fish.

One of the ways – I showed that chart where we were able to show the average with the Maryland DNR average and what the fishermen were checking in. One of the things that became significant in this case to give proof of concept to what we were doing was we looked at the average weight, so you have the Department of Natural Resources average weight on the top of this chart, and here we have various license holders who were defendants in the case.

This is their average weight before and after the search warrants were done in this case. We did seven simultaneous search warrants in three different jurisdictions when we finished the covert phase of this case and overt with the investigation. What happened between those years for those same fishermen – and then, of course, the prosecution goes on. It takes a number of years before we're able to have the result.

But just between when the search warrant was done, before and after you see the same fishermen. These are the same fishermen fishing in the same place, and you can see the change in their average weight per

fish once they knew the investigation – once they knew they were being looked at in the investigation. So this showed us that our math was right, and in fact all the fishermen ended up accepting our math in plea negotiations and pleading guilty. Only one of the fish wholesalers determined to go to trial and to challenge what we were doing. That was a five-week trial that ended up in convictions. But, this to me was significant and this made me rest easy that we were on the right track here.

The other thing that I thought was significant, in the course of the investigation there was an individual, a family, the Tippets who have third generation and fourth generations striped bass fishermen in Maryland. In the course of the investigation, when we talked to people, everyone said when the agents would go out and ask and said, "Who does it right, who is doing this right, who is checking in their fish?" And everyone would say, "Ah, Mrs. Tippett"; you know, 70-some year old woman whose son and grandson were fishing, she would be the one to check in the fish, and the people that checked in the fish knew them and knew that she wanted it done right.

So when we decided let's go look and see – now since the evidence and the investigation, we have identified someone that everyone tells us does it right, we went and looked at their averages. So if you look at the averages between one of the individuals that was convicted, Mr. Lumpkins, you see his average weight of the checked in was 2.28 and 3.6. When you look at the licenses, it's very close. Average weight of striped bass reported was 3.29 and 3.6, so very, very close and what the biologist will say was not a statistically different variation.

That slide became interesting, too, and I talked about this with the court at sentencing, and, you know, we hear from fishermen all the time. We hear from – the defendants would come in at sentencing and say, "Look, I'm just trying to make a living; times are hard; I'm trying to get." My point is that the fishermen that I feel bad for is the honest fishermen, the Tippet who is doing this and doing it right and isn't getting to make the extra money that the fisherman who fishes one – maybe it was two miles down was where these two gentlemen had their nets set apart from each other, and, you know, that's the person that I want to see the law protect and that is the person I think about when we're investigating and prosecuting these cases.

Virginia was slightly different because they said they were open with a slot size when the PRFC was

closed. The value of the fish would go up significantly in the Middle Atlantic Area. The price per pound would go up significantly so the Virginia fishermen would actually wait. Even though they had an ability to catch fish at other times, they would wait – and that’s fine; that’s commercially smart, but they would wait until that spawning season, when everything else was closed, and then they would go fish where they were not allowed and target the size fish they were not allowed to target and did it quite successfully.

They would cross into the PRFC and then they had an outlet. They had commercial wholesalers that were willing to buy that oversized and untagged fish. Okay, so we had plea agreements and convictions. It was over 1 million pounds of illegal striped bass we were able to document during the time period with a fair market value we estimate between five and seven million dollars for the time period of the investigation.

It was 19 individuals were convicted, three corporations were also convicted, a combined total of 148 months in prison, 41 months of home detention, and \$1.6 million in fines and restitution were recovered and a good portion of that either went back to the state or went to the National Fish and Wildlife Foundation for the Chesapeake Bay Rockfish Restoration Account to be used to fund rockfish restoration and enhance species survivability.

In addition, jurisdictions took actions against the licenses. Certain individuals have lifetime bans from the PRFC, and then you see the Virginia suspensions. Some of the individuals again with the one year versus the lifetime were lower-level actors and not engaged in the activity to quite the extent that the other folks were. At this time Maryland had no ability to suspend licenses, so that’s why you don’t see any Maryland suspensions up there.

I understand Maryland has changed its regulations; and that’s one of the things that came out of this case, Maryland made substantial changes to a number of its regulations. Maryland puts the years now on the tags; a limited number is issued to the license holder; and unused tags must be returned annually.

Now Maryland is keeping track of who is returning what tags and how many they’re getting back, and that’s giving them more data that they’re able then to use to better regulate the fishery. A nice thing that has happened, too, is there has been a bit of a perception change at least in the Chesapeake Bay

Watershed Area. We’ve gotten very favorable media attention from this.

I would say that I think the uniformed officers and those out in the field would bear this out, that there is a much greater awareness in the commercial fishing industry of the scale of the problem and a more positive attitude; remarkably after an extensive criminal prosecution a more positive view of the law enforcement in the area and of the regulations in general.

I think there was a large comment feeling in the industry that folks were getting away with murder; and in fact when we interviewed the Maryland fishermen, the Maryland license, they said, well, that’s a license to steal, that is what that means, and it’s all about fishing by the numbers, and then they proceeded to explain it.

That was an outcome I did not quite expect, and I don’t know that members of the task force expected that either. So, sort of coming down to the fine point here, these were the control measures that in the course of the investigation revealed were ineffective at controlling the harvest.

So using a slot season, it’s very difficult to have the enforcement officers on the water to enforce the slot season, particularly when that jurisdiction butts up against a closed jurisdiction. Then a tagging system that allows for tags than reasonably correlates to the quota, that is what was the license to steal in the Maryland fishermen’s opinion. Varying gear type and tag quantities; in other words, recognizing hook and line it is more difficult to catch; or, opening seasons. You know, that was a problem that was very difficult to control.

These are control measures that from an enforcement perspective became very difficult if not impossible for the state officers; and without spending these kinds of resources and launching this kind of investigation to uncover the illegal fishing, it’s very difficult for a uniformed officer to be able to make those distinctions of what is a hook-and-line caught fish versus what is a net caught fish or pound net caught fish, for example.

They can’t do a forensic analysis in the field. A tagging system with no expiration on the tag or the tags don’t expire, without the year on the tags and no collections leads to a surplus of tags in the system. The differing jurisdictions – having just substantially different regulations from jurisdictions sharing the same body of water is incredibly difficult from an

enforcement perspective to accomplish effective enforcement.

And without spending, again, these kinds of resources, which we don't do all the time and states don't do all the time, you simply don't have the ability. Not having a uniformity in regulations for close jurisdictional states and even distant jurisdictional states was revealed as a problem. Check stations with an economic interest in checking in the fish, that was revealed.

Maryland thought that, well, we have the check stations and the fishermen will do this, and the investigation simply revealed that wasn't the case. And then when you have the fisheries data collection without analysis to determine compliance, a lot of the numbers that we crunched were numbers that were available to the fisheries regulatory side, but it just wasn't an analysis that anyone went and tried to do with an enforcement mindset, to try to view do we have a problem and where is this problem?

Some recommendations to improve enforceability and accountability; again, if there were some way to make striped bass tags uniform for all member states, that would aid in enforcement of the regulations significantly. If all member states put the years on their tag – one of the things in this investigation, as I'm sure you all noticed, striped bass harvested in the Chesapeake Bay ended up in many different states, and the wholesalers were actually buying striped bass from other states.

So from an enforcement perspective, to go in and look in a wholesaler's cooler and have this myriad of colors and different requirements from different states, proving a violation becomes very difficult from a law enforcement perspective. Year of validity I have talked about, unused tags returned. All states tagging would also significantly aid in enforcement.

What became an issue at trial in this case was Massachusetts that doesn't require tags on their striped bass. The wholesaler in question was buying fish from Massachusetts and tried to use that as a defense; that, "Well, how am I supposed to know what needs a tag and what doesn't? I don't know where these fish come from, and, look, I buy from Massachusetts," and there were Massachusetts wholesalers that came down and testified at trial about their tagging requirements and what was required. That became an avenue of defense in this case.

Something that would be significant would be simply printing the size limit on the tag. One of the years Maryland did this – or Virginia, I'm sorry, Virginia did this. It had its slot limit printed right on the tag. When we're talking about holding wholesalers accountable, that is the best way. That became an issue in this case.

Again, I think these are very small management measures that can be taken. Site tagging was another significant issue. By simply requiring the fishermen to tag at the net site or at the point of harvest, because what the fishermen told us they would do is they would have enough tags in the boat to cover the catch.

If they're stopped in route back to the shore or at some other point by a patrol, they'd say, "Oh, I just hadn't gotten – I just haven't tagged them yet" or "I'm just about to tag them, and oftentimes they'd be cited for that, which is a minor violation, and oftentimes the state judges would simply dismiss those charges. "Well, he had the tags in the boat; what are we talking about; why are you beating up on these poor fishermen?"

Well, what these fishermen that entered in the plea agreements told us is that was their plan, they would not tag those fish. If they saw a patrol boat coming, they would simply tag them; or if they got caught, they would say, "I had the tags in the boat", which they did to cover those fish, and so any state penalty was minimal. It really wasn't until we unraveled this scheme – I mean, it was one of those things that a very – it's a management measure, and the reason it's there is it makes the enforcement, the detection of this activity much easier.

License revocation and issuing a set number of tags – we found wholesaler accountability was difficult without uniform tags. Again, going into a wholesaler's cooler in the course of the investigation and seeing this rainbow of colors, from a federal law enforcement perspective we need to prove that they knowingly engaged in this activity.

One of the defenses we had to encounter was that "I didn't know what the requirements were from a day-to-day basis. I don't what is a legal tag. I don't know what is an illegal tag. I don't know that Virginia says 18 to 28, Massachusetts is 50." I understand states are going to have different regulations and different sizes, and that's one of the reasons printing the sizes on the tag would be a huge benefit to enforcement, but a simple uniform color per year would be huge.

That way there is a possibility of holding wholesalers accountable by saying you get a red tag in 2011 for any rockfish up and down the east coast. If a fish comes in in 2011 and it doesn't have a red tag, it's not legal. The management schemes need to be that simple in order to hold the wholesalers accountable; and without that, it makes enforcement very difficult.

Uniform tagging requirements for all states; again, for wholesalers, the fish has to have a tag and then it knows the colors and the sizes on the tag, you need to look at the tag and make sure it's the right size; very, very simple; no extra burden on fishermen whatsoever that you make those changes to make all states do it that way, and you would increase our ability to enforce these laws.

Then notice and education to the wholesalers; one of the defenses we heard was, again, I didn't know – and this is not listening for the board, but for states mailings, documented mailings to the fish wholesalers explaining in very simple ways what is legal and isn't legal will go a long way to countering an argument from the fish wholesaler I didn't know.

And then size limits on tags, and I talked about that; for all the varying sizes, that's a very significant change that can be made. I understand it cost more to print a tag with the size limit printed on it, but what you're going to – I believe what you're going to spend in money to print tags or collect tags you will make up for in enforcement or an ability to enforce your laws, because that's really, from again a law enforcement perspective, where I come out.

It's good to have these regulations; it's good to have the laws; simply laws without enforcement is merely a suggestion. If we can't enforce these laws, then all the regulations and laws that you pass are nothing more than just asking nicely for someone to do something, and it doesn't work that way.

The honest fisherman suffers, and we've shown in this case the honest fisherman who was doing it right had those averages, played by the rules, and that person is one who is really harmed by this activity, and that's who we should I think all be working to protect and preserve that ability and that way of life I know that we all share. That's the end of my formal presentation, and I don't know if we have time for questions.

CHAIRMAN TRAVELSTEAD: Unfortunately, we don't but let me thank you for that very thorough report and acknowledge the enormous amount of work that you and your team did to bring this

landmark case really, if you will, to an end. You've made a number of recommendations.

I think they're all important and I think they deserve a lot more discussion by the board. Unfortunately, today we don't have that time so I'm going to ask that staff make time on the next agenda for a board discussion of the recommendations. We will be meeting back in Virginia at our next meeting, and I'm hoping you all might be able to come back to that for more discussion. Jaime.

DR. GEIGER: Mr. Chairman, I understand that we're on time constraints, but I would submit that these recommendations are so important and so pertinent to affect the striped bass management that, again, I know we can't have that robust discussion today, but, first of all, I want to thank the members of the task force for an outstanding effort.

I tip my hat to all law enforcement efforts and officers for initiating this. I think we have seen a tip of the iceberg here, and I think we all need to take it more seriously. Mr. Chairman, with all due respect, **I would like to formally propose a motion to accept this report; and then after acceptance of the report provide these recommendations to all striped bass jurisdictions and follow up with some of these actually and follow up these recommendations within and between the state jurisdictions to try to prevent some of these obvious issues that are impacting striped bass conservation.** Thank you, Mr. Chairman.

MR. STEVE MEYERS: Second that, Mr. Chairman.

MR. AUGUSTINE: I got it.

CHAIRMAN TRAVELSTEAD: Pat Augustine seconds the motion to accept the report. Is there any objection to the motion? **The motion carries** and staff will distribute it to all of the states. Again, we will discuss it in more detail at our next meeting. Thank you, gentlemen, again for the work you've done. Michelle, is there anything urgent we need to know about North Carolina?

NORTH CAROLINA STRIPED BASS FISHERY UPDATE

DR. DUVAL: No, I think the details are in the board packet and I'd be happy to talk to anybody further if they have any questions about what we're doing for the upcoming 2011 and 2012 fishing year and any questions about the limited entry proposal we can

discuss that offline or postpone it until the next meeting.

CHAIRMAN TRAVELSTEAD: Okay, we'll hear from you at the next meeting, too. Wilson, you had a Coast Guard request real quick.

U. S. COAST GUARD REQUEST

DR. LANEY: Yes, just very briefly, Mr. Chairman; this also relates to law enforcement. The U.S. Coast Guard has requested that the technical committee and the Striped Bass Tagging Subcommittee be able to share the data with them from the four coastal components of the coast-wide Cooperative Striped Bass Tagging Program. We just wanted to solicit the board's approval for us to go ahead and do that. It will facilitate Coast Guard Law Enforcement Operations offshore.

CHAIRMAN TRAVELSTEAD: Is there any objection to proceeding along those lines? Seeing none, you have the board's approval, Wilson. Kate, is there any state out of compliance with the striped bass plan?

FMP REVIEW AND STATE COMPLIANCE

MS. TAYLOR: In 2010 the PRT did not find any state out of compliance. There were quota adjustments made in 2011 for three jurisdictions due to quota overages in 2010. Thank you, Mr. Chairman.

ADJOURNMENT

CHAIRMAN TRAVELSTEAD: Thank you. Is there anything further to come before the board? We're adjourned.

(Whereupon, the meeting was adjourned at 4:05 o'clock p.m., November 8, 2011.)

THE CHESAPEAKE BAY STRIPED BASS INVESTIGATION

RECOMMENDATIONS OF THE INTERSTATE WATERSHED TASK FORCE AND

ASMFC LAW ENFORCEMENT COMMITTEE

Presented to the Atlantic Striped Bass Management Board

February 7, 2012

INVESTIGATION SUMMARY

At the 2011 ASMFC annual meeting in Boston, members of the Atlantic Striped Bass Management Board (Board) heard a presentation by members of the Interstate Watershed Task Force. The task force completed a successful investigation of illegal striped bass harvest and sale in the Chesapeake Bay area covering the period 2003-2009. The presentation included information concerning the illegal activities occurring, some of the harvest and tag data that were used to support the case, and specific recommendations for improving the effectiveness of striped bass regulations. The Board asked that additional discussion of the recommendations be continued at a later meeting. Present today are three members of the task force, Special Agent Ken Endress (United States Fish and Wildlife Service) and Sgt. Jack Bailey (Maryland Natural Resources Police) and Wayne Hettenbach (U.S. Dept. of Justice).

To recap, intelligence indicated that numerous incidents of illegal striped bass commercial violations on the Potomac River were occurring. After the investigation was initiated task force members uncovered two primary schemes.

- Fishermen from Virginia were targeting very large spawning fish in closed waters of the Potomac River Fisheries Commission and Maryland. Oversized fish were being taken during the spawning season and sold illegally.
- Fishermen in Maryland were taking advantage of loopholes in the state tagging system to falsely report large numbers of smaller fish, and obtain more tags to exceed quota limits.

In both schemes, some wholesale dealers were complicit through false recordkeeping, false check-in, and knowingly buying illegal or untagged fish. Specific illegal activities included:

- Taking fish during closed commercial season and tagging with open season tags.
- Taking oversized striped bass.
- Overharvest of quota.
- Disguise of true gear used for harvest.
- Re-use of commercial tags & use of expired tags.
- Illegal use of other fishermen's commercial tags.
- Sale of commercial striped bass tags.
- Unmarked, oversized gill nets targeting breeding stock.
- Untagged fish were able to be sold.

At the conclusion of the investigation team members determined that, from the cases involving plea agreements and convictions, over 1 million pounds of illegal striped bass were taken. The investigation resulted in:

- 19 individuals convicted.
- 3 corporations convicted.
- 140 months of cumulative prison time.
- 41 months of cumulative home detention.
- \$1,628,352 in fines and restitution.
- 58 years of cumulative supervised release.

The investigation revealed that some of the control measures in place for regulating the harvest of striped bass were ineffective or inadequately designed to maximize compliance. These include:

- Slot season controls to protect spawning.
- Tagging system that allows more tags than reasonably correlates to quota limits.
- Varying gear type tag quantities.
- Tags without an expiration or year identifier and no collection of unused tags.
- Neighboring jurisdictions with different regulations.
- Check-in stations with an economic interest in the fishery.
- Fisheries data collection without analysis to determine compliance.

The investigation has also shown that greater accountability of wholesalers would be difficult to achieve without:

- Uniform tags (colors, design).
- Uniform tagging requirements (all states).
- Valid Year inscribed on tags.
- Notice and education of dealers.
- Size limits indicated on tags.

LAW ENFORCEMENT RECOMMENDATIONS

As a result of this comprehensive investigation and criminal proceeding, the following recommendations were made by the Interstate Task Force and are endorsed by the Law Enforcement Committee of the Atlantic States Marine Fisheries Commission.

Recommendations to Improve Enforceability & Accountability

- Implement a Uniform commercial tagging system among all states where striped bass are harvested and landed for sale.
 - Uniformity by year, style, color and inscriptions.
 - Make tags valid for one year only.
 - Inscriptions should include year, state, state size limits, and unique number.
 - Use standardized, tamper-proof tags.
- Require all fish harvested for sale to be tagged immediately upon possession.
- Issue a set number of tags based on a sound scientific sample of the average (mean) weight of legal-sized fish harvested in open season for that gear type divided into the weight quota.
- Require all unused tags to be returned on an annual or seasonal basis and prohibit license renewal if unused tags are not returned.
- Strengthen reporting of tag numbers used on dealer reports or trip tickets.
- Implement License Revocation or suspension as a primary penalty for state or federal violations.
- Ensure that law enforcement officers have real-time access to tag numbers issued to each fisherman.

The State of Maryland has already enacted regulation changes to address some of the issues uncovered by the investigation.

- Regulations are now more enforceable by uniformed officers in the field.
- Year of validity is now inscribed on tags
- A limited number of tags are issued to each licensee (pound net fishery only).
- Unused tags for all gear types must be returned annually.
- Commercial license suspension or permanent revocation of repeat or egregious violators.

The Potomac River Fish Commission has prohibited some subjects from commercially fishing again in their jurisdiction and the State of Virginia suspended the commercial licenses of some subjects for two years, as allowed by their regulation at the time.

DRAFT

Connecticut Commercial Striped Bass Quota Utilization Plan

Initial Year Report (2011)

Commercial striped bass quota was used for the first time in Connecticut during 2011. Under Amendment 6 of the Striped Bass Fishery Management Plan Connecticut's commercial striped bass quota is 23,750 pounds. Beginning in spring 2011, Connecticut utilized this quota through a "bonus" recreational fishing program on the Connecticut River under an open slot limit from 22 to 27.9 inches total length. The conservation equivalency calculation of pounds to numbers of fish is very conservatively estimated to be 4,025 fish in this slot.

Recap of the Program

This small quota was utilized to permit recreational harvest of striped bass that are not accessible under the current 28 inch / 2 fish coastal recreational management limits. This new fishery was crafted to provide the dual benefits of a unique angling opportunity, particularly around the cities of Hartford and Middletown, and a means of practicing a limited form of "ecosystem management" by targeting striped bass where they prey on vulnerable populations of river herring, during their spring spawning migration up-river.

Monitoring Results

Harvest

Compliance with the harvest limit was achieved through a "tag" system whereby 4,025 (the quota in numbers of fish) post cards (see Appendix 1.) were made available to the public predominantly from agency offices. Per instructions, anglers filled in the tag (Appendix 1) immediately upon harvesting a bass, marking the month, day and length of the fish. The anglers kept the tag with the fish until returning home as authorization to possess the otherwise undersize fish for law enforcement purposes. Successful anglers were then required to mail the postage paid card back to Marine Fisheries.

A total of 80 tags were returned containing information from harvested fish. Four other tags were returned unused. Another 34 "protest" tags were returned, all from one individual with messages indicating his opposition to the program. Since only 2 tags were offered to an individual per day, this gentleman apparently visited agency offices at least 17 times in order to take tags out of the system for public use.

The low harvest rate is primarily attributed to high river flows associated with the wettest year in Connecticut history. A pattern of inverse catch rates to river flow is apparent in the figures below (Appendix 2) depicting daily catch rates and river flow data provided by USGS.

Biological Sampling

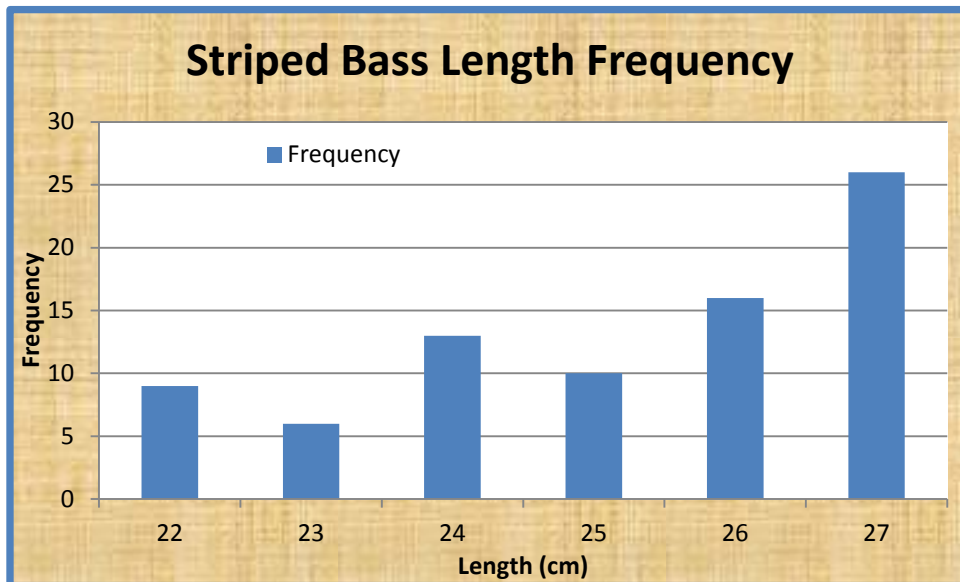
Fish harvested spanned the 22 to <28 inch size range allowed under the program with a general increasing trend with size (Figure 1, Table 1.).

Table 1. Length frequency of striped bass harvested under the bonus fishery program in 2011.

TL (cm)	Freq
22	9
23	6
24	13
25	10
26	16
27	26

80 = total number of measured striped bass

Figure 1. Length frequency of striped bass harvested under the bonus fishery program in 2011.



Assessment of Program

The bonus program was well received by the public, including the membership of our recreational fishery Marine Advisory Group and Fisheries Advisory Council. Media coverage was positive and the program served a very important outreach function as a tangible demonstration of agency efforts to provide recreational fishing opportunity to urban communities as well as the general public. The program provided an opportunity to work directly with “Riverfront Recapture” in the Hartford area, a group actively involved in efforts to improve the waterfront and attract urban populations to the river to enjoy and appreciate its beauty. Direct distribution of many vouchers through Law Enforcement

staff provided important positive interactions for officers with the public while also enabling the program to reach out to anglers who are not internet connected or otherwise likely to be aware of and participate in the program.

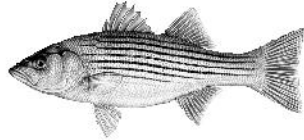
Actual harvest was well less than expected due largely to poor river conditions (high flows, turbidity, flooding). The card return system provided an efficient means of monitoring the size composition of the harvest and in providing a minimum estimate of the number of fish harvested.

Program modifications will be considered for 2012 including expansion of the program outside the Connecticut River basin in order “hedge our bets” on local fishing conditions as well as to respond to public calls for similar opportunities in other parts of the state. Such expansion will be considered in the context of balancing the dual purposes of this program: mitigating predation pressure on river herring populations and providing public fishing opportunity, particularly in urban areas.

Appendix 1.

Sample Voucher.

2011 Connecticut River Bonus Striped Bass Voucher



Circle the date and total length (inches)

May							June						
1	2	3	4	5	6	7							
8	9	10	11	12	13	14	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30	31					26	27	28	29	30		
Total length: 22" 23" 24" 25" 26" 27"													

Instructions: Immediately upon harvest of a qualifying bonus striped bass, use an INK PEN to circle the date of harvest and total length. Drop fractional lengths; for example, mark 25 3/4" as 25".

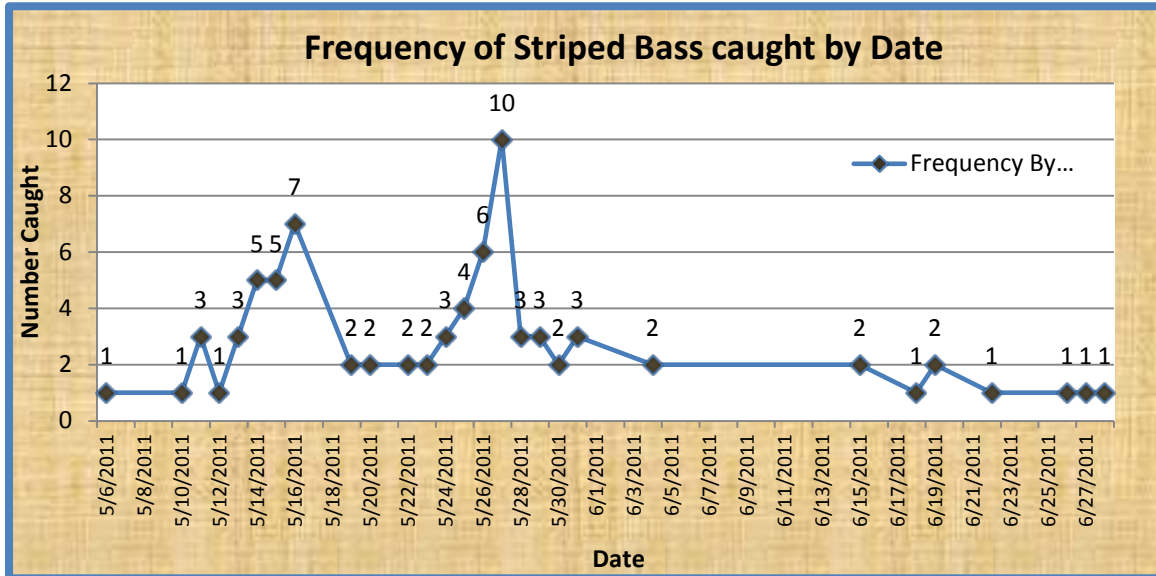
Important: Keep this voucher with the fish until you reach home. Once home, please drop this card in any mailbox; postage is prepaid. Mailing this voucher will provide us with important data necessary to ensure continuation of this program.

- This voucher is good for retention of ONE (1) bonus striped bass.
- TWO (2) bonus fish may be harvested per day.
- Valid only from May 1 through June 30.
- Valid only if completed immediately upon harvest of a qualifying fish.
- Valid only in the Inland District of the Connecticut River (i.e. above the I-95 bridge).
- Fish must be from 22" up to (but not including) 28" total length.
- The normal limit of two fish \geq 28" may also be harvested.

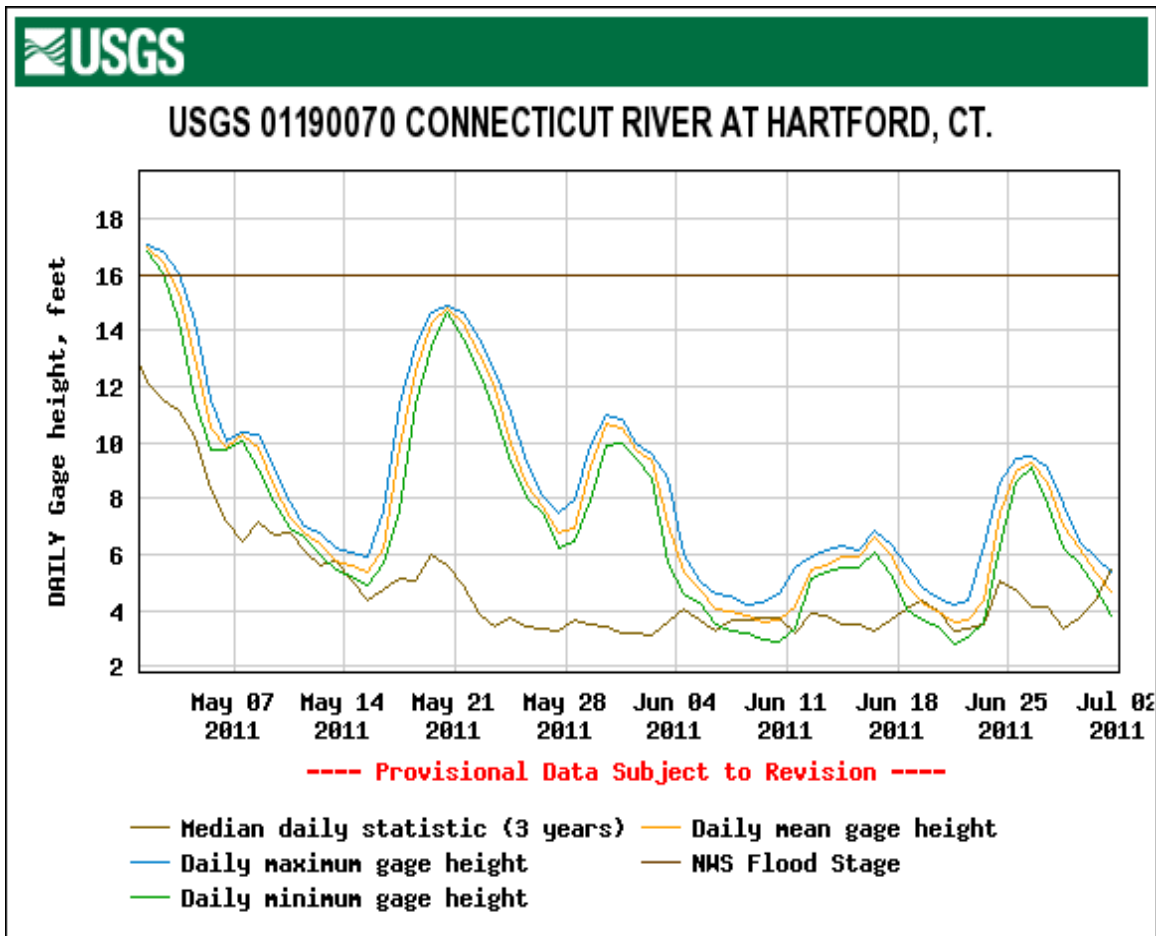
Questions?

Web: www.ct.gov/dep/striper
 Phone: 860-434-6043
 E-mail: dep.marine.fisheries@ct.gov

Appendix 2.
 Striped bass daily catch frequency in the bonus fishery.



USGS daily gage height for the Connecticut River.



Connecticut Commercial Striped Bass Quota Utilization Plan for 2012

Background

Commercial striped bass quota was used for the first time in Connecticut during 2011. Under Amendment 6 of the Striped Bass Fishery Management Plan Connecticut's commercial striped bass quota is 23,750 pounds. In spring 2011, Connecticut utilized this quota through a "bonus" recreational fishing program on the Connecticut River under an open slot limit from 22 to 27.9 inches total length. The conservation equivalency calculation of pounds to numbers of fish is very conservatively estimated to be 4,025 fish in this slot. This new fishery was crafted to provide the dual benefits of a unique angling opportunity, particularly around the cities of Hartford and Middletown, and a means of practicing a limited form of "ecosystem management" by targeting striped bass where they prey on vulnerable populations of river herring, during their spring spawning migration up-river.

A total of 80 tags were returned containing information from harvested fish. Four other tags were returned unused. The low harvest rate is primarily attributed to high river flows associated with the wettest year in Connecticut history.

Assessment of 2011 Program

The bonus program was well received by the public, including the membership of our recreational fishery Marine Advisory Group and Fisheries Advisory Council. Media coverage was positive and the program served a very important outreach function as a tangible demonstration of agency efforts to provide recreational fishing opportunity to urban communities as well as the general public. The program provided an opportunity to work directly with "Riverfront Recapture" in the Hartford area, a group actively involved in efforts to improve the waterfront and attract urban populations to the river to enjoy and appreciate its beauty. Direct distribution of many vouchers through Law Enforcement staff provided important positive interactions for officers with the public while also enabling the program to reach out to anglers who are not internet connected or otherwise likely to be aware of and participate in the program.

- Actual harvest was well less than expected due largely to poor river conditions (high flows, turbidity, flooding).
- The card return system provided an efficient means of satisfying ASMFC monitoring requirements regarding size composition and numbers harvested.

In 2011, the plan had two goals: 1) provide recreational fishing opportunity, particularly in urban areas; 2) reduce striped bass predation on troubled river herring stocks in the Connecticut River.

Historic high water levels in the River during the spring 2011 made fishing difficult or impossible for most of the May-June season. Although unlikely to recur in 2012, this experience leads us to consider expanding the program beyond the Connecticut River to “hedge our bets” a bit more to ensure a more successful program this year. Additionally anglers from around the state expressed interest in having a similar opportunity closer to home.

With a year of experience implementing this type of program – requiring significant administrative work to meet quota monitoring requirements (voucher printing, distribution, accounting and return processing) a broader program can be considered to address objective 1 above.

Total recreational striped bass catch, an indicator of stock size has fallen off significantly in 2010 and 2011 meaning predation pressure on river herring is now likely much less than it was as recently as 2009. The trend in Connecticut’s total recreational striped bass catch is consistent with a coastwide trend, reflecting smaller recruiting year classes recently. While the stock remains very healthy and ASMFC concluded in November 2011 that no new management actions are required, this reduced abundance of “schoolie” stripers means objective 2 is now less important and greater focus can be placed on objective 1.

Utilization Plan for 2012

Objectives

1. Provide broad opportunity for participation in the bonus program,
2. Provide urban fishing opportunity by distributing vouchers to Riverfront Recapture and similar groups working in an urban setting.
3. Provide positive public relations opportunity for:
 - a. Law Enforcement by distributing vouchers through EnCon officers,
 - b. CARE program by distributing vouchers through instructors,
 - c. Marine Angler Survey by distributing vouchers through creel agents.
 - d. Inland Angler Survey if one is active in a striper fishing area.
 - e. State Beaches/Parks by distributing vouchers at the gate at striper fishing locations (Harkness, Fort Trumbull (office), Rocky Neck, Hammonasset, Sherwood Island, Others?),
 - f. BNR by distributing at NE Hunting and Fishing show in February if possible – perhaps to trophy fish award winners, maybe in some form of lottery at the booth to generate interest/awareness??

Program Elements

1. The voucher system in place for 2011 was successful in meeting our needs for law enforcement as well as ASMFC compliance and will be used again in 2012.
2. The Open season May 1 – June 30 will also be in place again in 2012.
3. The program will be expanded statewide – to include both marine and inland waters.
 - a. Voucher distribution will be expanded to include outlets listed below.
 - b. DEEP offices (as in 2011),
 - c. DEEP Law Enforcement Officers (as 2011),
 - d. Riverfront Recapture Park Rangers (as 2011),
 - e. Tackle shops expressing interest (expansion of late 2011),
 - f. STATE PARK ticket offices where striper fishing occurs (NEW),
 - g. Marine Fisheries Division Creel Agents (NEW),
 - h. CARE Instructors (as in 2011),
 - i. City Park & Rec Dept's in other urban fishing locations where programs like Riverfront Recapture exist and voucher distribution can be efficient (Norwich, New London, Other cities?).
4. The number of vouchers will remain at 4,025,
5. Two vouchers per angler per day limit (as 2011).

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- a. Table 1. Total Connecticut Striped bass catch (including released fish) 2000-2011. Total catch has declined markedly in the last two years largely reflecting the lower abundance of “schoolie” stripers that would be targeted in the bonus fishery.

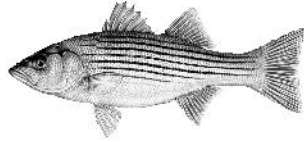
Year	TOTAL CATCH (TYPE A + B1 + B2)	PSE
2000	979,557	16.5
2001	1,161,872	14.6
2002	748,036	12.7
2003	939,020	15.1
2004	1,154,548	16.9
2005	1,828,506	15
2006	1,765,762	18
2007	1,941,755	16.6
2008	2,485,178	21.4
2009	1,354,340	23.7
2010	864,990	20.3
2011	464,178	22.5

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Appendix 1.

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Questions?

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DK