

**PROCEEDINGS OF THE  
ATLANTIC STATES MARINE FISHERIES COMMISSION  
AMERICAN LOBSTER MANAGEMENT BOARD**

**The Westin Alexandria**  
Alexandria, Virginia  
**May 2, 2016**

**Approved August 4, 2016**

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## INDEX OF MOTIONS

1. **Approval of Agenda by Consent** (Page 1).
2. **Approval of Proceedings of February, 2016 by Consent** (Page 1).
3. **Move to bring the postponed motion from February 2016 forward for consideration** (Page 34). Motion by Bill Adler; second by Steve Train. The motion carried by consensus (Page 34).
4. **Move to table indefinitely, the February 2016 main motion to initiate an addendum to address declining lobster conditions in SNE/MA** (Page 34). Motion by Ritchie White; second by Emerson Hasbrouck. Motion carried (Page 34).
5. **Move that the Board shall initiate an addendum to minimize stock declines by lowering fishing mortality and increasing egg production by a combination of changes to the minimum size, maximum size, closed seasons, closed areas, trap caps and cuts, standardizing regulations throughout the area, and or combinations of the above. Target egg production increase shall be not less than 40 percent above the level that would otherwise be produced with no additional management. Final regulations for this step shall be fully phased in within three years, no later than June 1, 2019** (Page 35). Motion by Dan McKiernan; second by Mark Gibson. Motion amended (Page 40).
6. **Move to amend; to insert “long term” before stock decline, and remove “increase should not be less than 40 percent above the level that would otherwise be produced with no additional management,” and insert “target increased egg production to be above the level that would be produced without management action”** (Page 40). Motion by Eric Reid; second by Mike Luisi. Motion fails due to a lack of majority (Page 42).
7. **Move to amend to replace “minimize stock declines” with “address stock declines in SNE” and to remove “Target egg production increase shall be not less than 40 percent above the level that would otherwise be produced with no additional management “and replace with “develop a range of long term increases in target egg production between 20-60 percent above the level that would otherwise be produced with no additional management** (Page 42). Motion by Doug Grout; second by Patrick Keliher. Motion carried (Page 49).
8. **Main motion as amended: Motion that the Board shall initiate an addendum to address stock declines in SNE by lowering fishing mortality and increasing egg production by a combination of changes to the minimum size, maximum size, closed season, closed areas, trap caps and cuts, standardizing regulations throughout the areas, and or combinations of the above. Develop a range of long term increases in target egg production between 20-60 percent above the level that would otherwise be produced with no additional management. Final regulations for this step shall be fully phased in within three years, no later than June 1, 2019.** Motion carried (Page 49).

9. **Move to have the Technical Committee respond to the following tasks (Page 51):**
- **Synthesize current literature and studies which investigate the connectivity between the GOM/GBK stock and Canada**
  - **Plot changes in size distribution of egg-bearing females over time in the GOM/GBK stock**
  - **Describe changes in GOM ocean currents and how this could be affecting larval supply patterns**
  - **Investigate the stock-recruit relationship in the GOM/GBK stock**
  - **Review on-going research on GOM lobster in order to identify research holes and prioritize the importance of these data holes to effective management**
  - **Examine the competing biological management measures between Area 1, 3 and the Outer Cape Cod to look at the benefits of harmonizing these measures**
  - **Investigate and develop a Traffic Light Analysis as a potential control rule using average harvest and abundance values from the last 10 years as baselines. This approach will include using multiple indices such as the settlement and ventless trap surveys, trawl survey data, landing information and other indices as recommended by the TC.**

Motion by Patrick Keliher; second by Ritchie White. Motion carried (Page 52)

10. **Main Motion: Move to adopt for Addendum 1 to the Jonah Crab FMP, Issue 1, Option A, 200 crabs per day, 500 crabs per trip; Issue 2, Option B, 200 crabs per trip (Page 56).** Motion by James Gilmore; second by Bill Adler. Motion substituted (Page 57).
11. **Move to substitute for Addendum 1 to the Jonah Crab FMP, Issue 1, Option B, 1,000 crabs per trip and Issue 2, Option D, 1,000 crabs per trip (Page 57).** Motion by Terry Stockwell; second by Roy Miller. Motion carried (Page 58).
12. **Main motion as substituted: Motion to adopt for Addendum 1 to the Jonah Crab FMP, Issue 1, Option B, 1,000 crabs per trip and Issue 2, Option D, 1,000 crabs per trip.** Motion carried (Page 58).
13. **Move to make the implementation date of January 1, 2017 (Page 58).** Motion by Doug Grout; second by Terry Stockwell. Motion carried (Page 59).
14. **Move to approve Addendum 1 to the Jonah Crab FMP as amended today (Page 59).** Motion by Doug Grout; second by Emerson Hasbrouck. Motion carried (Page 60).
15. **Move to initiate an addendum to create a coastwide standard for claw landings in the Jonah crab fishery with options to: 1.) establish a requirement to allow only whole crabs be landed; 2.) establish a requirement to land only whole crabs, but allow a specified (volumetric) amount of detached claws per vessel per trip, which meet a minimum length of 2.5 inches. Proposed volumetric amounts may include the following: a single 5 gallon container, a bushel, or a standard fish tote; and 3.) allow the unlimited landing of detached claws, which meet a minimum length of 2.5 inches (Page 61).** Motion by Jim Gilmore; second by Mike Luisi. Motion adopted by consensus (Page 61).

16. **Move that the American Lobster Board recommend the ISFMP Policy Board send a letter to the President of the United States of America regarding the following (Page 72):**
- **The preference of the Commission would be for the current NE Council coral management process to continue without Presidential use of the Antiquities Act to protect deep sea corals.**
  - **Should a President (CEQ) decide to designate a New England waters deep water Monument prior to the end of his Presidency, the Commission requests that any areas so designated be limited to the smallest area compatible with the proper care and management of the objects to be protected; as required by the Antiquities Act.**
  - **The area be limited to depths greater than approximately 900 meters, and encompass any or all of the region seaward of this line out to the EEZ. That only bottom tending fishing effort be prohibited in the area, and that all other mid water/surface fishing methods (recreational and commercial) be allowed to continue to use the area.**
  - **That the public and affected use groups be allowed to review and comment on any specific proposals prior to its implementation.**

Motion by Eric Reid; second by Emerson Hasbrouck. Motion carried (Page 75).

17. **Motion to adjourn by Consent (Page 78).**

## ATTENDANCE

### Board Members

Pat Kelihier, ME (AA)	Rep. Craig Miner, CT (LA)
Terry Stockwell, ME, Administrative proxy	David Simpson, CT (AA)
Stephen Train, ME (GA)	James Gilmore, NY (AA)
Sen. Brian Langley, ME (LA)	Emerson Hasbrouck, NY (GA)
Douglas Grout, NH (AA)	Mike Falk, NY, proxy for Sen. Boyle (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
G. Ritchie White, NH (GA)	Tom Fote, NJ (GA)
William Adler, MA (GA)	Brandon Muffley, NJ, proxy for D. Chanda (AA)
Rep. Sarah Peake, MA (LA)	Roy Miller, DE (GA)
Sarah Ferrara, MA, Legislative proxy	John Clark, DE, proxy for D. Saveikis (AA)
Dan McKiernan, MA, proxy for D. Pierce (AA)	Mike Luisi, MD, proxy for D. Blazer (AA)
Mark Gibson, RI, proxy for J. Coit (AA)	Allison Murphy, NMFS
David Borden, RI (GA)	
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	

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

### Ex-Officio Members

Bob Glenn, Technical Committee Chair	Jon Cornish, Law Enforcement Representative
Edwin Gwin, Advisory Panel Chair, Jonah Crab	

### Staff

Megan Ware	Max Appelman
Toni Kerns	Mark Robson
Robert Beal	

### Guests

Chip Lynch, NOAA	Jeff Deem, VMRC
John Bullard, NOAA	Joe Cimino, VMRC
Kelly Denit, NOAA	Beth Cason, MA Lobstermen's Assn.
Peter Burns, NMFS	John Godwin, Pt. Pleasant Beach, NJ
Mike Ruccio, NMFS	Greg DiDimenico, Garden State Seafood Assn.
Derek Orner, NMFS	Richard Allen, Little Bay Lobster, NH
Jason McNamee, RI DEM	Jeff Pierce, Alewife Harvesters, ME
Mark Alexander, CT DEEP	Abden Simmons, Maine Elver Assn.
Craig Wheedon, MD DNR	Arnold Leo, E. Hampton, NY
Marin Hawk, MSC	

The American Lobster Management Board of the Atlantic States Marine Fisheries Commission convened in the Edison Ballroom of the Westin Hotel, Alexandria, Virginia, May 2, 2016, and was called to order at 9:02 o'clock a.m. by Chairman David Borden.

#### **CALL TO ORDER**

CHAIRMAN DAVID V. BORDEN: If everybody could take a seat we're going to start the Lobster Board meeting. My name is David Borden, and I'm the Lobster Board Chair.

#### **APPROVAL OF AGENDA**

CHAIRMAN BORDEN: The first order of business is approval of the agenda. I would just like to note a couple of changes that I've made in the agenda to try to expedite the discussions.

When we get to corals I want to deal with the New England Council coral issue and the monument issue at the same time. Those will both be under Item Number 10. Under Item Number 4, Emerson has asked for a short period of time; like a couple of minutes to show a video on Long Island Sound. I've agreed to do that.

Then once we finish all of the reports under Number 4, I'm going to make some just general comments from the perspective of the Chair on what I think we need to get done today in terms of accomplishing certain tasks. Then we'll move into the tabled motion. Let me ask; Terry Stockwell, you wanted to add an item to the agenda?

MR. TERRY STOCKWELL: Yes, first I want to announce to the board that my seat here at the table today is from the council only. I will be abstaining on all motions not related to the Jonah Crab action, and secondly under other business requests that the agency briefly update the board on 2016 SBRM.

CHAIRMAN BORDEN: Okay, any other items?

MR. THOMAS P. FOTE: Mr. Chairman, we lost a member that used to serve on this board for many years; Pat White, and Joe Graham passed away since our last meeting. I would like to get a moment of silence to basically represent two people that strongly were involved in the Commission. Pat White was very diligent and Joe was here forever, so if we could get a moment of silence in remembrance of them.

CHAIRMAN BORDEN: Yes, I fully concur. All right, any other items to add to the agenda? If not we'll take the items in the order in which they appeared.

#### **APPROVAL OF PROCEEDINGS**

CHAIRMAN BORDEN: In terms of the proceedings, we had audio problems at the last meeting so I only have partial proceedings. Are there any comments on those proceedings? Seeing no hands up, any objections; excuse me, Bill Adler.

MR. WILLIAM A. ADLER: Yes this is a minor thing, but on one of the motions, Page 8 the motion was tabled and in the other section it was postponed, in the Index of Motions Made. I don't know that that is any big deal at all, whether it is postponed or tabled; but they conflicted.

CHAIRMAN BORDEN: Okay thanks, Bill. Any other comments on the proceedings, if not any objections to adopting the partial proceedings as they were submitted? No objections.

#### **PUBLIC COMMENT**

CHAIRMAN BORDEN: In terms of public comments, we have four individuals that have signed up. This is for items which are not on the agenda; and I'll just read off the names and ask you to go up to the microphone down in the corner of the room there and address the board. Try to keep your comments fairly short. John Godwin.

MR. JOHN GODWIN: Thanks for having me. I'm here to submit some comments from Maine, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Maryland and Virginia. We're all seeing the same problem with the varying minimum sizes among states. In New Jersey we have a minimum size, 3 and 3/8s. We are purchasing the majority of our lobsters from Gulf of Maine; from Massachusetts dealers and Maine dealers.

We wind up with a small percentage of lobsters that fall below our gauge size. We're being cited and issued summons and warnings for these lobsters. I'm hoping that by submitting this public comment from dealers, restaurants, supermarkets and various organizations that we can get a little bit of help in solving this problem with the importation of Gulf of Maine lobsters into southern New England states that have a slightly larger size.

CHAIRMAN BORDEN: The next person I have on the agenda is Dick Allen.

MR. DICK ALLEN: My name is Dick Allen; I'm representing the Little Bay Lobster Company. I wanted to speak to you about V-Notch enforcement; it is not on the agenda but it is closely related to the topics you will be talking about in how to improve lobster management. We would suggest that improving the enforcement of the existing V-Notch laws would be a good first step. Before you take a lot of new actions there is one simple thing that you can do.

We understand from people in the industry that there is a wide variation in the degree of enforcement of the V-Notch laws in the different states. We would just think that the first thing you could do is tighten up on that; get all the states onboard enforcing the existing laws. You are trying to leave females in the water; it appears that a lot of them that shouldn't be coming out of the water because they're v-notched actually are. We would suggest that that would be a good thing for the commission to take a look at and try to solve.

CHAIRMAN BORDEN: The next person on the list is Beth Casoni.

MS. BETH CASONI: Good morning, thank you, Chairman. Regarding southern New England, at the LCMT Area 2 meeting it was discussed at length to have a further look at the entire inshore habitat and why settlement is not happening. We would encourage for that to happen not just in Area 2, but the entire southern New England stock.

Then regarding the dealer possession size, we support the comments given earlier and there are so many varying sizes on possession; and this is from the dealer's perspective. The gentleman that just gave comment sells a million pounds of lobsters, and we don't want to lose that infrastructure and that dealer in southern New England. The southern New England fishermen are already in a hard place; so we ask the commission to look at that further.

CHAIRMAN BORDEN: Then next person I have on the list, Greg DiDomenico.

MR. GREG DiDOMENICO: Greg DiDomenico; Garden State Seafood Association, thank you, Mr. Chairman, thank you board members. I'll be brief. I also would like to lend our association support to this dealer possession issue. It is a broad issue but it is also a specific issue that I understand has to be worked out within our own state; and we're working on that right now.

But it would be extremely helpful for the board to perhaps have some discussion, a broader discussion about this and perhaps take this up at a specific subcommittee or an advisory panel within the Atlantic States Marine Fisheries Commission. The issue from a broader perspective is that the type of importation that has been going on in our state for a very long time, many businesses are dependent up it; many restaurants are dependent upon it.



That is why most people within the state that are involved in that business are supporting this effort. I just want to see if there is a way to urge the states to work together more cooperatively on this, and have a much broader conversation about how to make this work without having any conservation impacts to the lobster fishery.

CHAIRMAN BORDEN: John Godwin, you signed up twice. I assume you only want to speak once, is that correct?

MR. GODWIN: That's correct.

CHAIRMAN BORDEN: Just a couple of comments. This minimum size issue I know has come up very extensively in Massachusetts; and I might add Dan just to offer a couple of comments on how they've handled it. But I think the way for the board to handle this; some states have worked out ways of accommodating this type of a practice.

Maybe those states could provide information to New Jersey; in terms of the types of systems that have been set up. Actually, before I recognize Dan, Brandon, do you want to comment on this issue; since you are undoubtedly very involved in it?

MR. BRANDON MUFFLEY: I was actually going to see how you wanted to handle this. I have been speaking to a few other state directors. When we were in New Orleans this issue first kind of started to bubble up in New Jersey as something we wanted to look into addressing. I don't know if it is worth just me talking to some of the other state administrators on how other states, if there is any consistency among states and how we deal with this possession limited issue.

We've met with advisors and our marine fisheries council just actually last week on this issue, to see if we could come up with a resolution on it. I don't think we are quite there yet, so I would welcome more discussion; either from my state partners or here at the board level to see how best to handle.

MR. JAMES J. GILMORE: One other thing I think we could do, the LEC is meeting this week and there is probably, I know our state was involved; not in this particular one but a similar issue a year or so ago. It might be good to get some feedback from them and have some discussion or put on their agenda that they can give us some guidance on this. One of the complications is, is this is interstate commerce now it is not strictly state management; that does sort of muddy the waters a bit, so it would be good to get some advice from them.

CHAIRMAN BORDEN: Just to follow up on that. I like that suggestion, but to follow up on that. How many states in southern New England have an accommodation for this type of practice? Massachusetts does, but any other states that accommodate this type of thing, so you can ship in 3 and ¼ inch lobsters into a state where the landing and possession size on the water is 3 and 3/8? Do any of the other states have this?

MR. DAVID G. SIMPSON: Yes, we allow lobsters less than 3 and 3/8 to be handled in the state, shipped, transshipped, but not offered for sale.

CHAIRMAN BORDEN: Okay, thank you. Dan, do you want to comment on this?

MR. DANIEL McKIERNAN: In Massachusetts we have three different minimum sizes; because we sit at the convergence of the Gulf of Maine, Georges Bank, and southern New England areas. We have 3 and ¼ inch for Area 1, we have 3 and 3/8 for Outer Cape and Area 2, and we have 3 and 17/32 for our Area 3 fleet.

We've never increased our dealer minimum size or market minimum size above the 3 and 1/4, but we've also been fortunate to have some very, very stiff penalties that I believe it is around \$100.00 per undersized lobster. I think any state that might want to consider accommodating the commerce of these undersized lobsters should probably back that up with some stiffer penalties for any harvester that comes into that state with

lobsters that may meet the market size, but would be unlawful per their permit requirements.

CHAIRMAN BORDEN: My suggestion here would be for the states that have an interest in this to talk to Brandon. I particularly request Dan to provide input on how you actually handle this issue in Massachusetts. As far as the suggestion to have the Enforcement Committee, I think that is a good suggestion; but I think it will be easier for enforcement to actually review something if you give them a full package of a proposal that they could review on what is entailed.

If New Jersey, for instance, wants to do that; I would suggest that they submit a proposal to Jon and the Enforcement Committee. Is there any objection to doing that? The other issue is, and I'll just touch on these briefly, is the issue of V-Notch enforcement. There are a number of proposals you're going to deal with today in terms of potentially standardizing regulations in some of the areas.

I think this is an issue that the Enforcement Committee can weigh in on and provide some input to that as the process moves along. The habitat suggestion that Beth made, this is an issue that has come up a number of times in Rhode Island, and Massachusetts there is a lot of concern in the inshore lobster industry about the degrading habitat in some of these estuaries. To me this is an issue that the Commission can get involved in, but I really think the states have got to take a predominant lead in it; particularly the water quality. People in the states should look at some of these issues. Is there any other discussion on any of those points?

#### **NEXT STEPS FOR MANAGEMENT OF THE SNE AMERICAN LOBSTER STOCK**

CHAIRMAN BORDEN: If not, we'll move along into Item Number 4. This issue just by

background, we've had a whole series of technical reports on the status of the southern New England fishery. You're going to get another one today. I think Bob Glenn and the Technical Team have provided us with at least five reports, maybe more; related to that we're also going to get a report from Rhode Island.

We'll get a report from Megan that responds to a board request on Plan Development Team actions. We've got two reports from two lobster conservation management teams that are starting to formulate guidance on if we have to take an action on southern New England lobster. They are trying to prioritize what they think should be done. Then we've got the issue of Emerson's short video.

What I would like to do is to work through those different technical reports. My guess is that when we finish all those we'll probably take a five minute break; so everybody can get a cup of coffee and stretch their legs a little bit. Then we'll move into the main item on this, which is to define whether or not we're going to do an addendum and what the goals and objectives for that addendum are. Let's start off with the first Technical Committee report; Bob Glenn.

#### **TECHNICAL COMMITTEE REPORT**

MR. BOB GLENN: One of the primary tasks given to the TC for this report was to look at the impacts of a gauge increase on the southern New England stock. To achieve this we used the simulation model that we used for the projections to analyze the effects of increasing minimum size. One thing to understand is that the impact on the stock from a gauge increase is highly sensitive to both the rate of growth and the rate of natural mortality; specifically on the unfished portion of the stock.

For this analysis to try to give you some insight as to how growth and natural mortality affects the impacts of a gauge increase, we used a range of growth rates and a range of natural mortality rates to look at that. To understand a little bit about that relationship, and given for a biomass

to increase, you basically are looking at the number of animals at size, times their growth rate, less how many die from natural mortality.

That gives you kind of an idea in very simple terms of how the stock has the potential to increase under a gauge increase. An important point is that as M increases, and I'll show this in a little bit more detail in a minute. But as M increases the benefits of a size increase diminish, because increasing proportion of the stock dies before reaching minimum legal size.

Under real high M situations the benefit of a gauge increase is substantially less. Also the benefits of a size increase diminish under slower growth rates, because the longer it takes for a lobster to grow to minimum legal size, the more time M has to work on the stock. It is kind of balancing those two things out when you try to determine the overall impact. For this analysis, all the simulations assume a constant rate of exploitation based on the terminal year of the assessment.

What we're going to show you as how the gauge increase would impact the stock, assume that the exploitation rate does not increase or decrease. Then finally, all the simulations assume a constant rate of recruitment; and I just wanted to point out that this is a fairly tenuous assumption given the empirical trends in young of the year lobster settlement that we've witnessed in recent years. The three growth rates that we looked at were what we called the base case, and that was used in the last assessment. This was the fastest rate of growth used in the simulation, and it is based on historical tagging data. Some of the issues with this that give the TC heartburn is that it has an improbably fast rate of growth for small lobsters, and an improbably slow rate of growth for large lobsters; large female lobsters specifically.

We wanted to test that growth assumption a little bit and we used kind of an ad hoc best professional judgment method to come up with two additional growth estimates. The second

one was what I would refer to as the intermediate growth model. This is based on the female molt probability that is calculated off the proportion of sublegal lobsters that are bearing eggs.

For this growth curve, the lower end of the growth curve was set to a 33 percent molt probability; which means that at a maximum the inter-molt duration for a female lobster was at a maximum three years, whereas in the base case that assumes that the maximum inter-molt duration for large lobsters is up to five years, which the TC just feels is pretty improbable; because we never observe large lobsters that are full of encrusting animals. Their shells don't look like they have been there for five years.

Then finally we used a slow growth model to kind of give some contrast. This assumes that all females reach sexual maturity by 75 millimeters carapace length; and in this case there is a max inter-molt duration of four years at 90 millimeters. This is just from females to the left and males to the right.

As you can see the three different growth trajectories and these are molt probabilities, so this is the annual probability that the lobster will molt. Basically what this shows in the bottom is carapace length. What it shows is that for animals that are small, like say 60 millimeters, your annual probability of molting is anywhere between 80 and 100 percent.

Then as lobsters grow, get bigger and bigger, as they get bigger their growth rate and their inter-molt duration slows. For natural mortality we basically took a broadcast approach and we looked at 11 values ranging from 0.15, which is the assumed background rate of natural mortality up to an M of 0.4.

Based on the most recent stock assessment, looking at likelihood profiles, the TCs estimate of where natural mortality currently is is between 0.24 and 0.27. Again, I just wanted to note that as M increases the effectiveness of the gauge

size change diminishes. This figure here, the three panels represent the three different growth rates that we use; the less the base case, the middle one the intermediate growth rate and then the one on the far right is the slow growth rate.

The X axis is the carapace length, and then the Y axis is the relative equilibrium biomass under current exploitation from the projection model. The dashed vertical line you can see is the 86 millimeters, which is the current minimum legal size in southern New England. Then you can see incrementally, depending on which rate of natural mortality and which growth you assume what the impact of minimum size increase is.

What we found is that increasing in minimum size resulted in increased stock biomass under all scenarios. Slowing the growth rate or increasing natural mortality resulted in smaller increases in biomass. The largest increase in the spawning stock biomass observed, was in scenarios with fast growth and low M; which is what we would expect. Under slow growth and moderate to high M, only minimal increases in spawning stock biomass were observed; even at very large size increases. In addition to looking at how gauge increase would impact the stock biomass, we also projected how it would affect the catch in the fishery. In this figure this represents for those same three rates of growth and the range of natural mortality values, the relative catch at current exploitation at size.

Again, the vertical line is current minimum legal size and this basically demonstrates, depending on what rate of M you choose and which growth rate you choose that at least for the five millimeter increase, long term you would not have a substantial or any reduction in catch; depending on the growth rate used.

Then as you get larger and larger, it is obvious that you see the catch decline. This graph goes all the way up to, I believe 108 millimeters. In this case you had a minimum size of 108 millimeters; you see that overall the yield to the

fishery is substantially lower. The effect on catch of increasing the minimum size varied across those scenarios.

Under low natural mortality rates when M was less than 0.2 increasing the minimum size can increase total yield under the base case and the intermediate growth scenario. At the current rate of M, which we estimate at 0.275 in the last assessment, yield remains fairly stable with increases in the minimum size up to 90 millimeters.

Then finally, long term loss in yields were observed in all growth scenarios with increases greater than 90 millimeters and M equal to or greater than 0.275. I forgot to mention one thing about what each of those values represent. When we're talking about equilibrium, in the model in this particular case we're allowing the model to basically reach its long term equilibrium point; so that would be a case of about 20 years for it to reach that.

I'm going to show you in a second that there are definitely short term reductions in catch that result from increasing the minimum size. What this last figure represents is the equilibrium, so after 20 years at that size where the eventual yield would end up. We boil all that down and we use, to make it a little clearer to see, just using what we currently assume natural mortality rate to be of 0.275.

You look; the figure on the left is the relative equilibrium biomass for the three different growth scenarios. What you can see based on an M of 0.275 is that in all scenarios changes in minimum size would increase stock biomass under all the given assumptions that I indicated at the beginning.

Similarly, if you look over at the equilibrium catch over the long term, is that you don't see much of a loss in total yield up to about 90 millimeters; but once you exceed 90 millimeters loss in yield does start to decline fairly

substantially. That is also dependent on which growth rate is used.

For a scenario just to get everyone a sense on, depending on how you go about a gauge increase; whether you did it in small moderate increments, or in one big step. We looked at an analysis where we increased the current minimum size 3 and 3/8 up to 3 and 3/4 inches. One scenario was where we increased up that distance the whole 3/8 of an inch in one year. When we did that we would expect a 50 percent decline in catch in Year 1, but the equilibrium catch in this case would be achieved in Year 4. In this scenario we saw the most rapid increase in spawning stock biomass. The next scenario is increasing the 3/8 of an inch over a course of three years. In this case there was obviously a less severe drop in catch, and equilibrium was achieved in five years. We saw a moderate rate of increase in spawning stock biomass.

Then finally, if we increase the 3/8 of an inch over a longer period, six years, we see a very gradual decline in catch. It takes equilibrium is achieved in 8 years, however in this scenario we see the slowest rate of increasing spawning stock biomass. In conclusion on conclusions for the gauge size analysis, we found that an increase of 5 to 10 millimeters may result in increased spawning stock biomass after 20 years.

Short term changes in catch and biomass will be more dramatic but what will reach equilibrium over time. The benefit of a gauge increases are highly sensitive to growth rate and to natural mortality rate. It is also important to note that this analysis does not account for spatial variability in the size distribution of the stock.

As you all know, lobsters are not distributed evenly by size. Smaller lobsters tend to settle inshore and as a result the inshore fishery tends to work on a smaller size distribution than the offshore fishery does. We would expect that the effects of the gauge increase are likely to be more dramatic inshore than they would be offshore.

The assumption of constant recruitment we feel is highly optimistic and is not supported by the empirical trends that we see in young of the year settlement. The analysis also assumes that the exploitation rate stays constant, meaning that fishermen would not compensate for the gauge increase by increasing fishing effort.

If that were the case, if the exploitation rate were to increase then those projected benefits of a gauge increase would not be realized. If recruitment continues to decline, projected increases in spawning stock biomass due to increases in minimum size will not be realized. Finally, the TC cautions that large reductions in mortality are still required to stabilize the stock and the increase in the adult population is dependent on favorable environmental conditions.

We feel that changes in the minimum size must be combined with other management measures to realize substantial improvements to the stock. Mr. Chair; that is that portion, I don't know if you want me to continue with the rest of the report, or if you would like me to entertain questions about that analysis. It is your call.

CHAIRMAN BORDEN: I think we'll expedite the discussions if we just take questions on it section by section. I think it will be easier for you too, Bob. Everyone understands this is not the point where we're going to debate some of these. If you've got a question on the analysis ask a question on the analysis, so any questions for Bob?

REPRESENTATIVE SARAH PEAKE: Thank you, Bob, for that portion of the report. I'm just curious as I look at the graph there analyzing the decline in catch, more severe if implemented over a shorter period of time. What kind of baseline survey has been done? Are the larger lobsters even there, or have environmental factors or other factors led to a mortality; so that we may see a sharper decline in catch than what is being anticipated? I guess I am curious what

went into your analysis of how steep that slope is or not in the catch decline.

MR. GLENN: That analysis is based off taking the starting stock biomass from the last terminal year of the assessment, and then using a projection model including the rates of growth, the rates of natural mortality; and then the changes in the gauge sizes, and letting that run forward for 20 years, and then doing that multiple times.

Then looking at the distribution of that to see what the point estimate would be. Empirically we look at the size distribution of lobsters in southern New England. We do see larger lobsters offshore in the canyons. We do see some larger lobsters in the inshore portion as well, but obviously more offshore.

CHAIRMAN BORDEN: Any other questions? No hands up, go ahead, Bob. Oh, excuse me.

MR. MUFFLEY: I have two questions, one a simple one I guess. Was there any reason behind selecting 3 and 3/4 as the gauge size to go up to?

MR. GLENN: Yes, the 3 and 3/4 was when we looked at the – I'm going to pull up a figure, this figure here – actually I'm sorry we'll go with this one; 3 and 3/4 inches is, I believe it is about a 10 millimeter increase from the current size. What we saw there was that that would have a fairly substantial increase in the spawning stock biomass, but the equilibrium catch in total yield to the fishery in long term would stay fairly similar.

MR. MUFFLEY: Not specifically related to that but in thinking in terms of the projections that we looked at in February. I see here this shows that if we went up to 3 and 3/4 inches, which equates to about a 50 percent reduction in harvest, shows some pretty sizeable increases in SSB.

Under some of the forward projecting work, like I said presented in February, it showed we need

a 70 to 80 percent reduction just to stabilize SSBs. Just wondering what the differences are between what the stock may respond to here versus under the forward projecting stuff from February.

MR. GLENN: Yes, in this analysis it is basically by increasing the minimum size you're changing the fished portion of the stock, so you get that immediate bump right out of the gate.

CHAIRMAN BORDEN: Anyone else? Doug.

MR. DOUGLAS E. GROUT: One of your concluding statements is; if recruitment continues to decline increases in SSB due to minimum size will not be realized. One of the things that struck me in the last assessment is that over the last 10 or 12 years we've seen a continual decline in recruitment to very low levels right now. Is there any indication that the environmental factors may change; that we may be getting more positive recruitment?

MR. GLENN: No, there isn't any evidence that I've seen to suggest that recruitment has improved in southern New England or that the environmental conditions have improved or are likely to improve.

MR. EMERSON C. HASBROUCK: My question was somewhat similar to Doug's, so part of my question has already been answered. But the other part of my question is do we know anything about M and the natural mortality? Has that been increasing over the past few years? The reason I'm asking is that you qualified many of your statements with environmental conditions. Again, the question is, do we know if natural mortality has been increasing?

MR. GLENN: Yes, we do know that it has increased. Based on work that the TC did in the last assessment we shifted the natural mortality up to coincide with a large change in oceanographic conditions in southern New England that happened in the late 1990s. We had kind of a step increase where we went from

0.15, which is the assumed background natural mortality rate for lobsters.

Then starting in the late 1990s, based on empirical data on temperature anomalies, as well as looking at other things that occur like die-offs and increase in the rates of shell disease, there was a pretty clear break around 1998; where the conditions changed. Then from there we increased that up to 0.275 and then allowed the model to run at different scenarios, and then based on the maximum likelihood or the best fitting model essentially; we honed in at a rate of 0.275.

MR. WILLIAM A. ADLER: Following up a little bit on what Doug said. We did an awful lot down there to help the situation out by reducing the traps, increasing the gauge, putting a maximum size. Apparently that hasn't helped. Then I start to wonder about, in the computer models it helps if you go up in the gauge and everything else.

But I'm wondering if we're just going to have even more natural mortality. I presume your natural mortality has to do with shell disease and predation, because the warm water doesn't necessarily kill a lobster; they just leave town. They might be out somewhere else. But I just have questions as to ratcheting up the gauge more; we already did, nothing happened. I don't know how this is going to change, and this is the conundrum we're all in I'm sure.

CHAIRMAN BORDEN: Anyone else have a question on this section? If not, we're going to move on to the next section, Bob.

MR. GLENN: This is actually something that the TC put together that wasn't necessarily something that the board specifically requested, but something that we thought was important to kind of put the southern New England discussion into context. We conducted an analysis where we looked at the relative importance of M; natural mortality and fishing mortality on the southern New England spawning stock biomass.

In a nutshell what we found was that M has had a consistent impact on SSB within the two observed regimes. M was responsible for moving about 9 percent of the SSB between 1980 and 1997. Then after 1998, about 17 percent of the SSB that M removed. But looking at fishing mortality we found that currently fishing mortality is removing between 35 to 39 percent of the SSB, which is roughly twice what is being removed from M right now.

This suggests that even at elevated levels of M, management actions can still have positive effects on SSB. We just essentially wanted to put into context that fishing mortality still is a substantial source of the total mortality in southern New England. While M has increased and is an important factor, we can't underestimate the impact of continuing to fish on the stock.

We wanted to kind of add some. The original stock recruit relation that I showed the board last time around didn't include all the years going back in the time series. We probably should have, because I think looking back to the early 1980s kind of gives some additional context to what is going on in southern New England. What we've seen is that recruitment has plummeted over the past decade while SSB has remained fairly constant. This suggests that there is some type of a compensatory mechanism that may be at play; in that recruitment appears to be decoupled from SSB.

The different possible causes of this are reduced mating success, lower survivorship of the early life history stages and increased predation. If we look at this stock recruit history, going back to the early 1980s you can see in the early 1980s we had similar levels of SSB as what we have right now; yet those early years were responsible for producing extreme high spawning stock biomass that occurred in the 1990s.

If you look at the top, the lighter line, the dashed gray line; you kind of see a regime there where

there were probably positive environmental conditions where even at low spawning stock biomass, the stock was able to put out some fairly high recruitment levels. Then you see starting after the mid-nineties that relationship starts to change.

What we see there is even with very high spawning stock biomass, after about 1998 we start to produce fairly low levels of recruitment. Then after about 2003, for that given size of spawning stock biomass we see the recruitment level really start to plummet. Are there any questions about the last two parts?

CHAIRMAN BORDEN: Questions for Bob? I just offer a personal comment. This is kind of an amazing slide, I think; because you think about the environmental change that the lobster resource has been subjected to over the period of time. Essentially we've gone full circle through a period of very high abundance and very high recruitment.

Now we're back where you've still got kind of the same SSB in place, but the recruits have just fallen right out of it. One of my questions to you, Bob is that the assumption in most of the models is that natural mortality is estimated to be about 0.275 is that correct? If it goes higher than 0.275, what does that do to the projection?

MR. GLENN: I don't have the exact projections in front of me, but I know from studying them enough that if M goes much higher than 0.275 there is almost not scenarios by which stock biomass can be increased. It will just continue to decline.

CHAIRMAN BORDEN: Other questions? Any other questions, if not let's move on to the next segment please.

MR. GLENN: The board asked the TC to weigh in on the cost and benefits of standardizing regulations in southern New England. The TC came up with the list of benefits being that we felt this would decrease the competitive effects

of disparate management measures along LCMAs.

As we all know, southern New England is carved up into four or five different LCMAs. We all know that the lobsters obviously don't know there is a boundary there, so if you have adjacent areas that have different minimum sizes, you have situations where one lobsterman is throwing over an animal and then one fishing adjacent to them in the next zone can then harvest them; and obviously that conservation isn't realized in that case. We also felt that it minimizes the impacts of management related to size selectivity on the population; that ensures lobsters are equally susceptible to fishing pressure regardless of where they are located in southern New England. It simplifies the current regulations leading to enhance enforcement and compliance.

It will certainly improve future analysis on stock conditions as scientists will be better able to estimate the effects of the fishery on the lobster population. But it does come with some cost. It ignores the existing population demographics, including spatial trends and size and sex. What I mentioned before, lobsters are not distributed evenly across the inshore and offshore area by size; so if you standardize that you kind of create a situation where you can have haves and have not, because simply as lobsters grow up and get bigger they tend to move offshore.

It can also create inequities between LCMAs, some of which may be long term due to ontogenetic shifts in lobster habitat use, i.e. the movement of lobsters offshore from the coastal nursery areas as they get bigger. Portions of the fleet would have to make gear modifications, especially to their escape vents to standardize.

As the LCMAs are currently defined, standardizing regulations in southern New England would have impacts throughout Area 3, including the Gulf of Maine and Georges Bank. Should the board consider standardizing regulations, it may be necessary to separate the



southern New England portion of Area 3 from GOM and Georges Bank.

Then a couple of additional consequences that we came up with was that increasing a minimum gauge size would disproportionately impact inshore fishermen who primarily rely on lobsters which have recently recruited to the fishery and contrast a decrease in the maximum size would primarily impact Area 3 fishermen; whose catch is comprised of larger lobsters.

Then one additional consequence is that standardizing the biological measures would eliminate the need for permit holders with multi LCMA trap allocations to declare which area or areas will be fished. Assuming a fisherman is not limited by his or her trap allocation; uniform regulation including trap caps would remove the necessity of the most restrictive rule.

This would benefit due permit holders, since they would have greater flexibility in where to fish, but it could be at a cost to a single area permit holder who may experience increased effort moving into the fishing grounds. Any questions on the cost benefit of standardizing regulations in southern New England?

CHAIRMAN BORDEN: Questions, Dan.

MR. MCKIERNAN: Bob, thank you for your description of the problem of seeing six different zones within one stock unit. Did the TC also make note of what I would consider the very large overlap zone as another conundrum in addition to the movement? You've got that overlap zone between two and three. Was that noted at all?

MR. GLENN: I don't believe that we noted it in the report. We did discuss it at the meeting. Again that is even a more complex issue where you have an area that is shared by two areas with different rules; that kind of reinforces all the issues that we brought up.

CHAIRMAN BORDEN: Anyone else? Okay Bob, you're up again.

MR. GLENN: Okay, home stretch. Finally, the board had asked us the attainability of the current reference points. What we came up with is given that none of the projections which use the current natural mortality rate of 0.285 from the last assessment show the stock reaching an abundance of 22.5 million lobsters, which is the reference point. The TC feels it is very unlikely this reference point will be achieved under present environmental conditions.

CHAIRMAN BORDEN: Questions on this point? Okay no hands up.

MR. GLENN: Okay and then finally the board had tasked us with looking into the potential of conducting some inshore/offshore tagging studies; with specifically looking at the inshore and offshore connectivity of lobster stocks in southern New England. The TC felt that previous studies show strong evidence of a migration in which adult lobsters make directed seasonal migrations offshore in the fall and return inshore in the spring.

Benefit from an additional tagging study may be minimal in increasing our knowledge on stock connectivity. However, the TC does know that there is a lack of information on growth and size specific natural mortality in the lobster fishery and believe that a tagging study would be useful to address these data gaps. It would also give us a more modern update on the connectivity.

I guess there is a potential that given the changing environmental conditions that stock connectivity could have changed, so a tagging study would also give us a chance to update that; because the last tagging data done that looked at that was done in the sixties and seventies. The TC provided information in the report on two additional tagging studies; one was a southern New England inshore/offshore connectivity and study that I put together that had a rough budget of about \$250,000.00.

Then there is also a fair amount of information put in there from New Hampshire. Josh Carloni, as well as representatives from Maine, who are currently working on a tagging study in the Gulf of Maine; looking at Gulf of Maine and Georges Bank connectivity, and their current study I believe is requested, or is it funded for \$107,000.00. But I think there was also a need to do some additional work with that as well; and that is all I have.

CHAIRMAN BORDEN: Any questions? Bill.

MR. ADLER: Bob, could you go back to the slide before, the 22. This was basically saying that the abundance is 22.5 million lobsters, okay. What was that figure back before the boom that came in the nineties? Where was that whole thing back then? Was it near 22 or way above or what?

MR. GLENN: What the 22.5 million lobsters represent is the reference point, the median level of abundance. At the last board meeting we presented several scenarios of changing the reference point, including taking out those boom years; and because that's a median not a mean, taking out those boom years has fairly small impact on lowering the reference point.

With the median any one given value, median being the middle value of the time series, it doesn't have that much impact. Any one value doesn't have that much impact on the median like a mean would. But in a nutshell what the TC is saying here is that at current rates of natural mortality, we don't feel that it is possible to reach that. There was no scenario that we ran that we were able to reach that under current environmental conditions.

MR. ADLER: Okay, I understand that. I guess where I was going to was back where we say how many lobsters there are there now, whatever that figure is, and forget the boom years and go back to when it was not the boom. I know somewhere in your paperwork you have what

the stock size, I guess that's what I meant, the stock size was before the boom and the stock size now as best you can get. Are we back to where we were in the nineties or lower than where we were before the boom? Do you have that figure, roughly?

MR. GLENN: Yes, I do have it in front of me. I just don't have it in this presentation. I had it for the last presentation. But looking at it right here, we're currently below 10 million; we're around 8 million lobsters. That is the lowest point that we've seen in the time series.

MR. ADLER: Even back before the boom?

MR. GLENN: Even back before the boom.

CHAIRMAN BORDEN: Other questions; yes, John.

MR. JOHN CLARK: Thank you for the informative presentation, Bob. I was just curious. I know last time you said that the offshore spawning, the eggs and juveniles would come inshore and tend to drift in a southwest direction. For the spawning stock at the southern part of the range, would it be fair given the poor environmental conditions and the poor recruitment to assume that they're really not contributing much at all to this stock right now?

Because their spawn would be likely drifting into really poor conditions as they head southwest, and if so would treating the entire southern New England area as a single unit. I am just curious as to whether way down at the southern end whether this spawning stock is almost like a dead end where juveniles end up there, grow there, but are not contributing to the stock.

MR. GLENN: Well, for that to be the case you would have to assume that those adult lobsters don't make annual spawning migrations into favorable areas. All the tagging studies that we've conducted historically show that egg bearing females in the springtime make

migrations into favorable areas to hatch their eggs.

We don't specifically have any tagging studies from the far southern end of the range there to show that. But my assumption would be that it wouldn't make any sense evolutionarily for an animal to put that much energy into producing eggs, to not then migrate to put them somewhere. I think the TC would feel that the life history model would be that those animals make a migration to hatch their eggs in the appropriate place so that the larvae eventually will settle out in a favorable area.

MR. HASBROUCK: Bob, the slide that you have up now where the current natural mortality rate is 0.285. Earlier on in your presentation several minutes ago, and I don't recall if it was a slide that you had or if it was just a statement that you made; essentially that if M goes higher, I'm not sure what value you mentioned. But if M goes higher than a certain value then none of the scenarios that you ran are going to result in increasing spawning stock biomass. Do you recall what that number was? Was that 0.285? Was it some other number? Then I have a follow up, please.

MR. GLENN: Just to clarify the question. Do you mean at what point does it have to get to before there is nothing you can do to stop the decline, or do you want to know what value that is?

MR. HASBROUCK: Yes, as I said before, you made a statement or it was a statement made in one of your slides that if M increases above some level X; and I don't recall what you said X was, then none of the scenarios that you had are going to result in increasing spawning stock biomass. The first part of my question is what is that number? What is X, in that statement that you made?

MR. GLENN: Okay, I'm pulling up the stock projections that I presented last time, and if you just give me a second I can look at where that falls. Okay so according to the projection that

I'm looking at right here, where we assume we're currently at 0.275. That is even more updated from the last assessment, and the last assessment was 0.285.

We did some additional likelihood profiles and we've narrowed it down to 0.275, where we currently are. Then if you look at the stock projections, when M gets to 0.325 the stock, even at the current constant rate of mortality the stock will decline; and then above that it really starts to decline, so 0.325 would be the value.

MR. HASBROUCK: Thank you, you've also answered my follow up as well, so thank you.

CHAIRMAN BORDEN: Any other questions for Bob, if not Bob, are you finished; that's it? Okay so the next presentation is by Jason and Jason, if you wouldn't mind I would like to handle it the same way. Go through each segment, we'll take questions and then move on to the next one. Thank you.

MR. JASON McNAMEE: My name is Jason McNamee; I work for Rhode Island Marine Fisheries. Once the last stock assessment came out and there was sort of general understanding that some management would be needed for lobsters. Rhode Island wanted to help out and lend some support to the Technical Committee, so we started to develop what I'll refer to as a set of tools that we thought could be helpful to the Technical Committee.

This following presentation basically outlines the tools that we brought forward to the Technical Committee for their review. Bob already had a lot of things to discuss with you, so since I was going to be at this meeting anyways, talking with Megan, they asked that I at least cover this section for Bob; give him a little bit of a break. Again based on the last stock assessment it became apparent that we were going to need to start talking about management for the southern New England stock area.

What we did was we looked at the information that we had available and began to think about, well what are the areas where we can look at reductions and harvest reductions, and what are the tools that we have available to get at some various management goals? In addition to those very, sort of pragmatic analyses, we also looked at some spawner recruit information. This is some work that Mark Gibson from Rhode Island had been thinking about and working on for a long time, and so we thought this was a good opportunity to investigate that a little bit more. The presentation has basically three main categories. The first thing that we looked at was the relationship between traps fished and realized exploitation rates. Trap reductions is this kind of marquis management effort, in particular in Area 2. We wanted to begin to think about, well what does that mean by way of exploitation? Where might we end up once we get through these trap reductions?

We looked at the information that we had at hand to see if we could develop a relationship that could answer that question. We also looked at some technical measures to reduce F and preserve the remaining spawning stock biomass. Bob in his presentation talked about this a little bit. What we are going to show you is a more parsimonious analysis, a little simpler.

I think these types of simple approaches sometimes can lend some good context to the more complex modeling procedures. Then the final piece is this alternate stock recruit relationship information. I am going to start off with the effort control; this is the trap reduction stuff that is occurring in southern New England, at least in parts of southern New England.

The data used for this analysis was southern New England traps fished. This was taken directly from the stock assessment document. In our first cut at this analysis when we were bringing it forward to the Technical Committee, we didn't want to start to create datasets that hadn't been looked at by them before; so we tried to base all of these analyses off information that we know

the Technical Committee was familiar with and had worked with in the past.

The time series of exploitation is taken directly from the stock assessment document for the southern New England area. Based on that information on numbers of traps versus the estimated exploitation rate in southern New England, what we did was we developed a model, basically a curve to fit the information that we had available. This model, it is a really simple model; it is a Michaelis-Menten function. This is something that is commonly used for enzymatic reactions, but it is just a standard model that describes a curve.

We fit this curve to the data using two techniques; we use sort of a standard statistical approach, maximum likelihood. Then just to give us some context as to whether we are getting information that was similar, we tried a different approach; and we tried a Bayesian approach as well. Normally for such a simple model with only two parameters you don't need Bayesian techniques to get at that.

But the idea here was, besides the fact that Bayesian statistics are kind of neat, it was just to approach it from a different angle to see if we can come up with the same results. The Michaelis-Menten model has two parameters, and the parameters make sense; that is kind of why we picked this model to work with. Just not to ruin the surprise, but the model was fit; it successfully converged on a solution under both approaches. Here is a look at the result. The graph that you're looking at on the Y axis is exploitation rate.

Along the bottom are thousands of traps. Again, this is traps fished. That is taken directly from the stock assessment document information. I'll get to that discussion when I sum up this portion of the presentation. What you see, the dots are the traps fished in each year and the resulting exploitation rate that was estimated in that year, and the red line, the curve that is the predicted model fit to that data. On the right hand side

what you see are the parameter estimates from that analysis. As I mentioned, we tried a different angle on this and we ran it through a Bayesian statistical technique, and the take home from this slide is that it looks exactly the same. The parameter estimates were, for all intents and purposes, exactly the same; small nuance differences, but not enough to impact the way the curve fit or looked.

How might you use this kind of information? What is its value? What you have now is a relationship between the traps that are being fished and a resulting exploitation rate from that number of traps. What you can do is follow your way down that curve, depending on what your goal is. Here what I've offered, you can kind of see it up there, so there are these gray almost like a target on there.

What that target is honing in on is where we believe we will be once the 50 percent trap reduction effort in Area 2 takes place. The numbers are up there under that second bullet, but the take-home point is you can draw a line on this curve and then track your way back to that exploitation rate to figure out where you're going to be.

Now if you have a goal in mind, you can see where on this curve you need to be to get to that goal. I think this is my final slide on this. Both the Technical Committee and the industry raised questions about this data source traps fished, and its usefulness for this analysis. The question came up; can we find alternate data that we think better represents what is going on? We don't necessarily think traps fished are the best data source to use.

That is fine. That is something that we can improve on in this analysis, but the underlying idea here is to develop this tool that we think is useful for, we're doing all of these trap reductions; is there a way to actually quantify what those trap reductions are doing? We've gotten a couple of ideas from the Technical Committee and the industry as to what sources

of data we might also try, so we can move forward with that if warranted.

These reduction calculations, once you can kind of hone in on that; you can combine them with other efforts. We don't have to put all of our eggs in one basket and try and go for a single approach to reducing or meeting the goals that we want to meet. We can combine them together. To kind of stick with this strategy, I'll stop here and take any questions you all might have on this part of the analysis.

CHAIRMAN BORDEN: Questions for Jason?

MR. DAVID G. SIMPSON: Thanks, Jay and thanks to your group for doing this work. I said to Dan before we started all of this that what the Technical Committee and you folks have done is really helpful. It is really useful and helpful information. Could you put up the curves, one of the curves?

You've got a pretty good range in traps fished, but in the neighborhood of where we are now there is a great deal of variability above and below the predicted line. Is there any pattern over time of the points being above or below the line? In other words, you know we had similar numbers of traps probably today and recent years as we had in the eighties and then out to the right is more like the ramp up into the nineties. Is there a pattern within that period there?

MR. McNAMEE: I'll take a crack at an answer. I'm not sure that I completely understood your question, so re-ask if I don't get to what you were actually asking. Yes, it is interesting as you look at the pattern. I'll say the data is distributed pretty equally above and below the line, which is good for a model.

However, the variability, which is why we couldn't use a sort of standard linear regression or something like that on this data. The variance is not the same through time. I think it is more a matter of, as you look out towards those 800,000

traps; there are just not that many data points out there. It may in fact be that the variability is just as high down there, it is just that there is only a few of those really high years.

However, as you get now towards the 300,000 trap range you can see that variability in the data points on the graph expands a little bit. Then as you get further down it truncates a little bit, but not as much as it does way out at the higher end. There are definitely differences in the variability. One of the nice things about using a model is you can account for that variability; you know you can calculate standard errors or medians or whatever around the predicted value.

MR. SIMPSON: Yes, so the follow up. Between the 200 and 400,000 trap range. I think as I said, probably some of that data comes from the early eighties when the stock was higher than it is now. Some of it comes from recent years where the stock is lower than it was back then. I'm wondering if there is an influence of stock size on the relationship between exploitation rate and number of traps fished.

On one hand, what we observed is that the remaining traps being fished are placed where the remaining lobsters are. I am expecting that the exploitation rate would remain high until they fish out those areas and not randomly distributed effort. I just wondered if you noticed any kind of pattern in that regard, which would inform us even more than this curve; in terms of how much response we should expect to get from further trap reductions?

MR. McNAMEE: Yes. We didn't look at I guess a time series of information with regard to stock sizes, not something that we looked at, certainly could; so just add an additional column of data. But I think to get at maybe the root of your question. I think it is exactly why we see a curve and not, again a linear relationship between these two metrics. It is in fact because fishermen are good at what they do, and they kind of know where to go.

Attrition is probably occurring in the weaker areas or when the population is really high that kind of expanded area of suitable, but less suitable habitat. That should all be, it is not necessarily an element within this model. It is in fact why you model it with a curve and not with a linear relationship.

Because you know that there is going to be an area of traps that are out there where yes they will kind of shrink down to the most prime habitats where the animals are going to be all the time, but at some point you're going to hit that tipping point, and that is where all the action is in the curve.

MR. SIMPSON: The point is, the area of the curve that has the greatest shape is where we have no data, and so my concern is that it could be that the slope, the ascending arm coming out of the zero, zero; the point we haven't observed, fortunately but we know is accurate, could be much, much steeper. We could find that very, very few traps can still exert a very substantial amount of fishing mortality. That's my concern. Working within the range of observed data, you understand the variability; but as we start to talk about managing outside the range of our experience there is just a great deal of uncertainty.

MR. McNAMEE: Yes, I don't dispute; in fact this type of thinking is exactly why we ran it under two different approaches to see if we come up with a similar answer. I'll suggest that the data here does provide enough information to the model to tell it where to bend. As you look at this graph, it is pretty steep to the origin.

I think it is fairly conservative, in particular if you look where we start to run out of data. If you just used that kind of information you would have a much shallower curve, but this curve is pretty steep; so I guess my suggestion to you is the model with the data available had enough information under two different statistical techniques to come up with the same solution. Overall I think it is a fairly conservative model.

CHAIRMAN BORDEN: I've got Doug Grout and then Bill Adler.

MR. GROUT: Jason, can you tell us which one of those gray circles is the terminal year of the most recent stock assessments, i.e. where are we right now on this curve? It says the exploitation is at 0.27, but I can't quite figure out how many traps that relates to.

MR. McNAMEE: Yes, it's a good question. I probably should have identified that on here. I didn't. It is one of the, I don't know half dozen furthest to the left on the graph, so I'm just not sure which point it is.

MR. ADLER: Part of I think what Doug was getting at was what I was going to get at, like okay so at what level are we supposed to be at or could we be at? We've gone down, at least in Massachusetts from roughly 60,000 down to 22,000 roughly in trap reductions. It hasn't helped. The reduction is still going on.

I don't know at what level you would have to be at in trap numbers to maybe, and I just can't see that it is going to do anything. I did notice that in your report you said trap reductions can be used in combination with other measures. It is almost like, well they're doing the trap reductions, they've done the trap reductions, and they've done everything they can on trap reductions. I'm almost thinking that any further trap reductions are futile.

CHAIRMAN BORDEN: Anyone else on this segment? If not, Jason the next one.

MR. McNAMEE: All right, so the next set of analyses I think dovetail nicely with some of the information that Bob showed you in the beginning of his presentation. We also looked at size changes. In addition to the existing effort control plan, we wanted to look at, you know if you did that in combination with these other procedures what would that look like?

Again, what Bob showed was a much more complex modeling procedure. This is a much more parsimonious procedure. What we did was we grabbed bio-sample data, this is that sea sampling and port sampling information that we're collecting. I truncated it to the years of 2010 through 2012.

But the nice thing about using the bio-sample data, and Bob mentioned this in his discussion. They are not able to necessarily tease that apart in the more complex modeling procedure; but we know the stat areas that are inshore and the ones that are offshore, so we can split that data out and look at it by inshore and offshore.

The final point here is we used all the information we could get our hands on. This was state collected data, federal data and also the Atlantic Offshore Lobstermen Association information that they've been collecting as well. What we did was we took all of that information and then generated length frequency distributions, which we then examined for different gauge changes; minimum increases, maximum decreases, things like that.

This is just a look at, I promised Megan I would keep it to 15 minutes and so I'll try to stick to my part at least, 15 minutes; meaning the questions add more time, nothing against you, Bob. This is a look at the inshore data. I'm just going to use that as an example. Pretty good sample size for the years that I examined, about 126,000 samples that were taken.

The distribution looks pretty nice; it is kind of what we believe to be the case. During the stock assessment this was kind of the information that was being used as well in a more complicated way. That is what it looks like, all of the data together. What we then did was to first take out everything that was under the minimum legal size for the inshore area. Then we began to more or less chop off the different bars on this chart.

What you can get from that information is the relative decrease, and you're making the

assumption that this distribution represents the population that is being fished, and therefore if you take some of those off the table of what can be fished, you've now protected those animals. All of the things that Bob talked about earlier with deprecating them by natural mortality and all of these other things are very important.

This does not consider those things; it simply protects these animals and then calculates what that relative protection is. I've showed two different examples here of 1/32 gauge increase and then a second 1/32 gauge increase and I know that is probably hard to read; but the first one we calculated gets you about a 13 percent reduction in harvest and the second one gets you about a 25 percent decrease in harvest.

You can do it from the other end as well, again chopping off what is already protected by the existing minimum legal size. You can then begin to chop off things on the maximum size and that is what we've done here. There are three examples. You can see that you have to come in pretty far to get a lot of harvest protection on the maximum side, but the nice thing about the maximum gauge is that those animals are now protected in perpetuity, natural mortality and things of that nature notwithstanding.

Minimum size changes can be effective for harvest reductions and the potential for egg production, but they can be temporary in nature, so minimum sizes; eventually those animals are going to grow back into that fished population. If these are needed they should be done cautiously and in a phased approach.

Maximum size changes could have lasting protections, but you have to set them in a meaningful way. If you set it out so far that there is not even any animals there, it is not doing you any good. Including these measures with the existing trap reductions schedule could have meaningful impact on harvest reductions. Just a final thought here and then I'll pause for questions. I had available to me this, I guess historical dataset of bio-sample data; I would

prefer that we use more contemporary data if you were to like this procedure and want it pursued further, and I'll stop there.

CHAIRMAN BORDEN: Questions on this. Anyone? I don't see any hands up, okay Jason you can move along.

MR. McNAMEE: Okay, the next piece of this. We did a little egg production analysis that we presented to the Technical Committee. What I'm doing here is just giving you the concept that we originally worked with, but given some of the feedback from the Technical Committee, I've removed any of the numbers from this. But I'll flip through these quickly.

From that gauge change exercise you can examine the potential for egg production. You've protected a portion of the population; presumably some of them are females and presumably those females will produce eggs, so you can sort of do that very simplistic analysis and figure out the egg production from your newly protected animals.

There has been a lot of work done on the carapace length to fecundity relationships. We looked at the Estrella and Cadrin work from 1995, which was also used by the stock assessment. That is what we did our original analysis with, and you can apply this relationship to the females or the newly protected lobsters. Again, our analysis focused on the information in the bio-sample data.

The Technical Committee identified numerous areas where this analysis could be improved, for instance Tracy Pugh from Mass DMF was extremely helpful, gave us some really good feedback, such as adding in the maturity schedule; so all of these animals aren't 100 percent mature at these; depending on the size that you pick, and so she suggested we add that in.

Also to account for the fact that larger females do not produce eggs in each year, Bob gave some



information during his presentation on that. We were making the assumption that they all produced eggs in that initial year of protection. They also suggested that it was important to account for the population dynamics of the strategy over time, so what about natural mortality in Year 2, Year 3, and Year 4.

All of these perfections to the original egg production analysis, we've been working on those since that meeting and have a little bit of information. I'm not going to get into the specifics, because it is not fair to present as the Technical Committee hasn't reviewed, it is certainly based on the feedback of the Technical Committee; but I guess in summation what we would like to do is have you allow us to bring this updated analysis to the Technical Committee for further review.

All three of the main ideas offered by the Technical Committee we've developed those into a more realistic egg production analysis. We have some initial results; again strictly looking at gauge changes. But what we found is that modest changes can result in significant egg production increases, even accounting for all of these things like natural mortality, fishing mortality as well and then running these analyses out for a couple of years. We came up with this value of a 40 percent increase in relative egg production. I'm calling it; I put in quotes "modest" meaning you don't have to do a million gauge increases to get to that number. You can get there with modest changes in the current regulations. What we're trying to do with this analysis is strike a balance between adding realism into this parsimonious analysis that we're doing, but not creating a new stock assessment.

That is for the next benchmark, and so we're not trying to recreate the wheel here; we're trying to use information available, add in needed complexity, but not go so far into the complex realm that we've created some sort of new stock assessment model. If the board wishes, the updated analysis can be brought to the Technical

Committee for review. I can stop there or I've got two slides on stock recruit stuff, Dave if you want me just to flip through those real quick.

This stuff we offer, just by way of information, we don't know that it is very relevant to what you all need to discuss through the rest of today; but we thought you would find it interesting and it maybe is something that will pop back in your head when we're listening to John Hare, I think that is tomorrow maybe, with some of that discussion.

We also did some spawner recruit relationship work. We ran two sets of analyses; we did a fine scale one based on Rhode Island specific data, Rhode Island trawl survey spawning stock biomass information and our settler index that is specific to Rhode Island. Then we looked at it on a broader scale as well, where we then broadened out to the assessment document and used information from that document.

What we did was we fit Ricker type stock recruit models, Beverton-Holt as well in a couple of instances. Basically standard stock recruit models, but we added in additional parameters for environmental and alternate covariates for the model. We also did an analysis, which I'm not going to talk about here, but it is in the report that you all have in your meeting information, looking at the statistical fit of various data lags.

We think this might be helpful information for the Technical Committee moving forward. Just a quick look at some output, I will orient you to this graph. I just will point out that Mark Gibson produced this graph and it is for me very impressive. He figured out how to do a 3D graph in Excel. I've not figured out how to do that so it is pretty neat stuff. Settler density is your Y axis on the left hand side there. Across the front of the graph on the X axis is the spawning stock biomass.

Again, this is Rhode Island specific data in this case. Then your Z axis, this is the one that is on your right, kind of going into the board there.

That is the North Atlantic Oscillation Index. What you can see is the closest number to you is a negative value; it goes towards zero and then gets positive. This is an index of the North Atlantic Oscillation and Oceanographic System of high and low pressure oscillations in the North Atlantic.

Maybe a proxy, maybe a direct influence of stock dynamics; but what you can see here is when the NAO is in a negative phase, so this is the area of the graph closes to us, kind of coming out of the board, it is really flat, not a lot of response as spawning stock gets really high you don't get a lot of response and settlers really flat.

If you go into the board what you see is that curve gets really steep. What that corresponds with is that North Atlantic Oscillation as that gets positive you get a lot of contrast in your spawner recruit relationship. It becomes more of a relationship if you add in the NAO. That was just informational stuff for you. It is not necessary relevant to harvest reductions and egg production and things like that; but it is things that you can think about and ways that we can work with the Technical Committee when doing projections that can offer alternate projection scenarios, maybe something we could add into the next benchmark assessment as well.

It is important though to point out that you don't want to just kind of grab indices that have strong relationships; you want to make sure there is some causative agent there. You don't want to just look at spurious correlations, and so we're very cognizant of that. All right, I've got two discussion slides and then I can stop and take questions.

Just to sum up. There appears to be a reasonable relationship between traps fished and exploitation. I think that bodes well for trying to quantify what we're actually doing with our trap reduction efforts. You could use the model that we developed and projected trap reductions to quantify the effect of these trap reductions; and you can combine this information with anything

else that you want to do to get an overall quantification of whatever management goals that you have.

It appears that minimum and maximum size changes can produce reductions in harvest and increase eggs produced significantly. The spawner recruit work as I mentioned doesn't have an impact on the immediate work that you have to do today; but again we think it is useful work. It is interesting for sure, but we think it could have directed value and alternate projection information or estimation of biological reference points that are reflective of stock productivity rather than the kind of ad hoc, the medians and things that you're using now.

You use them because you don't have a good defined relationship. As noted, we've already improved the egg production analysis based on the feedback that we got from the Technical Committee. Just a final note, for all of this stuff for the Technical Committee to work as efficiently as possible; it is important to set some goals so they know what the goal is when they are kind of constructing these tools.

They can give you better information as to specific numbers. We've given you some concepts here, some tools. But once we have goals that are defined you can begin to use those tools for the specific purpose that you desire. Just a final note here, Rhode Island DEM is interested in working on this further with the Technical Committee.

We've done this, we have a technical representative on the Technical Committee; but we're in a period of transition with our staff. We think we've kind of ironed that out. We've got a young man working for us now that I think is going to be a really good fit for the Technical Committee. He will certainly be working, but we just wanted you to know that we're certainly interested in moving forward and continuing to work on this with your Technical Committee; and that's it for me.

CHAIRMAN BORDEN: Jason, when is the report going to be finalized? What is your estimate of a timeframe?

MR. McNAMEE: Could you ask that again, Dave?

CHAIRMAN BORDEN: When do you think the final report will be available for the TC to review?

MR. McNAMEE: Oh for the updated egg production analysis. I've got a draft of it from Conor McManus in my inbox right now, so relatively soon.

CHAIRMAN BORDEN: Thank you. Ritchie White.

MR. G. RITCHIE WHITE: Could you go back like five slides to the 40 percent egg production increase? Can you correlate the amount of reduction in fishing mortality it would take to create the 40 percent increase in egg production?

MR. McNAMEE: If the question is, can we do that the answer is yes; based on this analysis. This initial work was looking at differences in gauges, and so in the same way that we calculated just using the bio-sample data we could come up with calculations of harvest reductions, which we could translate based on some assumptions. But the answer is yes. I can't give you that number right now.

CHAIRMAN BORDEN: Any other questions? Steve.

MR. STEPHEN TRAIN: I'm just going around between this and the last presentation and I'm trying to figure out. We want to boost egg production, I get that. But we had fabulous egg production years ago and we still get that circle instead of the graph. Harvest rates, cutting back effort, we had great egg production but we've got no survivability. I guess what are we working towards by increasing the egg production if they're not going to survive anyway; should we be looking at something else here, another way

to get these things up to Stage 5 or 6 or something?

MR. McNAMEE: I will answer your question in part. I think the larger question is a question for the board. But to answer your question, I guess the underlying assumption, if you're looking at a goal of egg production, some value of egg production. What you are in essence saying is, while we understand that there are environmental drivers and we showed that there are certainly relationships between different environmental drivers and recruitment.

While we understand that we're in a regime right now where the environmental conditions are not conducive to a large recruitment event, the underlying theme of setting an egg production goal is to put eggs up in the water column at such a level that when the environmental conditions, if and when the environmental conditions do become conducive for recruitment; again you have the animals there to allow that recruitment event to take place.

It doesn't mean it is going to happen just because you pump a bunch of eggs up into the water column doesn't mean you are going to get animals on the other side. But you certainly can't if those eggs aren't there and conditions line up. That is kind of the very high level assumption of the goal I think, when you're setting an egg production type of a strategy.

CHAIRMAN BORDEN: Anyone else? Emerson.

MR. HASBROUCK: Thank you, Jason for your report and thank you to you and your team for putting this together. Could you go back to that interesting slide that you said Mark had created; the one with the NAO? Where on this plot are we currently and what direction is the NAO heading? Are we in the negative correlation or positive correlation?

MR. McNAMEE: Yes, great question. We are currently in a negative phase of the NAO; so we would be in that row that is kind of out towards

us in that plot. That really flat section of it. One of the nice things about the NAO; while there is high inter annual variability in the NAO, there are predictive chunks of time when it goes into a negative phase, when it goes into a positive phase.

It doesn't mean that every year once you go into a positive phase is what would be deemed positive. But when you look at these graphs of the NAO over time, you can see there are these kinds of chunks; so it is somewhat predictive, which is the nice thing about it. It is one thing to develop a relationship, but if you can't sort of predict what is going to happen into the future it doesn't have a lot of value for projections and things like that.

The direct answer to your question is we are in a negative phase of the NAO. If it follows the same cycle that it has followed in the past we would suspect that in the next five years, seven years, we would be going into a positive phase. I am not an expert on the NAO; but that is my understanding of it; and so I think that directly answers your question.

REPRESENTATIVE CRAIG A. MINER: I was thinking along, I think the same lines that Steve was. I'm concerned about, I guess not moving in a direction where we leave more eggs in the water; but at the same time I'm concerned that there is such a significant gap between leaving those eggs and seeing positive outcome.

Is there a model that would show what would happen if the settlement improved by 10 percent of 20 percent or 30 percent? Do we begin to move toward a target that we want; because right now it seems like there is a gap between eggs and juvenile increases?

MR. McNAMEE: I am going to give a very brief answer and then pass it to Bob. But I think that is in fact exactly what Bob showed in his presentation are the effects. He showed scenarios where it was a constant recruitment, but that is the model you would use to kind of

show different scenarios. What if recruitment improved, settlement improved? You could use the model that Bob reported on to kind of do that. But I'll pass it over to Bob.

MR. GLENN: I don't really have a lot to add to what Jason said, but he is correct. We could use the stock projection model to look at that.

CHAIRMAN BORDEN: Craig, have you got a follow up?

REPRESENTATIVE MINER: Please. But it doesn't seem, based on what we've been seeing over the last couple years that any effort to maintain eggs in the water has created improvement in juvenile production.

MR. GLENN: Yes, under the current high rates of natural mortality environmental conditions that we have; that recruitment is being lost essentially. That egg production that we currently have isn't being realized. Then I show the stock recruit relationship. You can see where it seemed to have decoupled. There doesn't seem to be a strong relationship right now between the size of the SSB and the amount of recruitment that we're getting from it. That is what you would expect under that kind of a scenario. But as Jay indicated before, the strategy in this case is to, you have to maintain some type of a core biomass; because when or if the environmental conditions do change, if you don't have a sufficient enough stock of lobsters there you can't take advantage of the positive environmental conditions and have a recruitment event. If you continue to fish them down even lower, even if the conditions do get to be positive; you won't have sufficient stock there to take advantage of it.

CHAIRMAN BORDEN: Any other questions here? Bill.

MR. ADLER: Bob, if environmental conditions improve, what does that mean? Does it mean that the water cools down, the predators go away? What are we looking at when we say

environmental conditions, if they improve? What would be the improvement? What would happen; if you have any idea?

MR. GLENN: What is causing current natural mortality is most likely a combination of environmental stress from high water temperatures, increases in predation, increases in disease and probably some changes in the reproductive behavior of lobsters in where they migrate and where they hatch their eggs, and then the overall settlement success.

When we talk about improved environmental conditions, it could be changes of any one of those things. It could mean a switch in the NAO, where we get into a positive phase where we tend to get cooler waters in southern New England. It could mean a reduction in the number of finfish predators would relax some of that natural mortality. It could be any of those things.

MR. ADLER: If I may. Yes that is what I was getting at. In other words, we've got to pull an iceberg down into the Buzzards Bay in cooler water; okay and we have to get the Black Sea Bass board to say yes, you can take more. That type of thing, which I suppose is unlikely. At least we know that we have the environmental conditions, if they improve; and what are they, what you just mentioned. We have to look to see, is there any chance that the environmental conditions will improve? Don't know, just leave it hanging.

CHAIRMAN BORDEN: All right I've got David Simpson and then Dan.

MR. SIMPSON: I apologize if I missed it. The relationship with the NAO is really interesting. Did you and I missed it, or could you speculate as to what about the positive phase might be conducive to better survival of recruits? My quick read online, the positive phase is actually associated with warmer temperatures in the eastern U.S.; but it also affects storm frequency

and position of the jet stream. I just wondered what you thought might be going on.

MR. GLENN: It's a great question. I could speculate right now, I won't. It could be a number of things. Temperature is not the only thing that the NAO is aliasing. In fact the way that I had been thinking about it is it also is a large driver of wind driven currents as well. There may be something with regard to transport of larvae and things like that. But as we know in biology and in oceanography, it is probably not just one thing that we can point our finger at. It is probably a mixture of these things, which is why our jobs are so hard.

MR. McKIERNAN: My question is for Bob. Bob, at the February meeting we looked at a rather large matrix of various statistics that describe the performance of the fishery and also of the stock. I think you had mentioned something about very weak year classes that have been detected by the section sample surveys.

I guess I would like if you could comment on what you perceive to be the weak year classes that are in the system now that we haven't even seen yet. When do we see these materialize? What signs should we be looking for over the next few years that this thing is going either off the cliff or maybe fortunately if things get better, for reasons that we have yet to understand?

MR. GLENN: As I mentioned in my presentation for those projections that the assumption was that there was constant recruitment at current levels. But the current recruitment in the model that we're seeing right now was based on moderate year classes that settled out in the early 2000s, and if I look at the longest time series of young-of-the-year settlement index; one that has been a pretty reliable indicator.

Looking at the Rhode Island young-of-the-year index, starting in 2007 and then getting progressively worse, especially around 2009 through current time, we've seen nine extremely low settlement events. If you lag how long it

takes a lobster to reach the fishery from settlement, by say eight years. The first really bad settlement year being 2008 and lag that by eight years. That gets us to this year, 2016.

Then the really low, like it hit zero in 2011 and hovered around that value 2010 through 2012. We would expect to see those between roughly 2017 and 2020. The take-home message is that the assumption of constant recruitment is probably not a good one in that the empirical data that we have suggests that recruitment is likely to decline from the current levels, not to stay constant.

MR. MCKIERNAN: David, to follow up to Bob. Bob, does that mean that if we watch the results this summer and the next couple years of the ventless trap work that we should see a substantial drop off in pre-recruits and recruits?

MR. GLENN: Yes, I would anticipate that in the next several years as these year classes get closer to the fishery, we should start to see the sublegal index for the ventless trap survey to decline pretty substantially.

MR. MCKIERNAN: Your ventless trap surveys are pretty good at what ages, like five to seven? Are those the prime ages that you're detecting?

MR. GLENN: It is good at really detecting animals in the like 60 to 75 millimeter range, which we would say probably four or five years old.

MR. MUFFLEY: This is for Jason. You kind of touch upon it, I think you said it a few times in your presentation, it is at the end of your report which I'm interested in is sort of this interaction term, kind of evaluating different metrics; trap reduction, and a gauge size change and those types of things and calculating those things together to evaluate what they might do.

A couple questions to that. Have you evaluated that analysis yet? Have you done any sort of examples in terms of what reductions might look like under different scenarios; and two, could we

look at multiple variables within that? A gauge increase, an effort reduction and also a seasonal closure for example, and would we need to apply those then across the entire southern New England stock or do you think there is enough information to do those interaction term at an LMA level?

MR. McNAMEE: I'll unpack a couple of those. I think a couple are more, I think good questions, but more directed to the board. The interaction piece of it goes from my finfish background. I know you've experienced that as well, Brandon. I just wanted to be very clear. One of the things, there was a lot of interest from the industry as we were kind of moving along with our analyses.

I just wanted to be very clear that is not necessarily an additive relationship if you take 20 percent reduction over here and a 10 percent reduction over here; it doesn't equal 30 necessarily. I just wanted to be very clear about that. We've not taken that next step where we're kind of developing actual on-the-ground scenarios yet; because I think there is still a step that needs to be taken as far as setting the goal.

Then we can start to develop the different scenarios of getting to that goal. We've not done that part of it yet. But I just wanted to have that information out there up front that these things are more complex than just adding them together. That was the intent of that section. Sorry if I missed something else that you had asked.

MR. MUFFLEY: Just towards the end. I'm just wondering if you think we could apply something like this. Would it need to apply across the entire southern New England stock, or do you think you could evaluate that at an LMA level or not?

MR. McNAMEE: Okay, yes good question. At this point a lot of the analyses that we have done have been southern New England. Now we were able to kind of split it inshore and offshore. I think we could probably look at it LMA specifically as well, but every time you parse it

the analysis gets weaker; because the sample size decreases.

I guess in a broad answer to your question. We've not looked at it LMA specifically. We looked at southern New England inshore/offshore, but southern New England. I think you could parse it up, but again if you think back to the finfish days, the more you kind of break the stuff down and make it more and more succinct as far as the space; you lose resolution in your data. Whether that means it can't be used, I won't say, but it definitely adds variability into the analysis. In some cases there might not be enough data, I'm not sure.

#### **PLAN DEVELOPMENT TEAM REPORT**

CHAIRMAN BORDEN: All right, I'm going to have to move on in the interest of time here. I'm going to take the next report, which is a Plan Development Team report; Megan.

MS. MEGAN WARE: Just to give some context to this presentation, the board asked the PDT in February to come up with some potential objectives and ways to achieve them for southern New England. I'm going to be going through those today. The goal here is really just to provide some ideas to the board, and giving you an idea of what it would take moving forward to achieve these different goals.

The PDT met via conference call March 23rd, and we discussed a range of management options that included increasing the spawning stock biomass through large reductions in harvest; to perpetuating the fishery at the potential expense of the stock. We also looked at the pros and cons of standardizing regulations, and I'll go through the different tools we use and kind of address those one by one.

One of the things that the PDT discussed really throughout the call was this conflict between increasing spawning stock biomass and perpetuating the fishery. I think that is also what the board has been kind of grappling with here.

The first objective is to increase spawning stock biomass.

From the projections at the last board meeting that would require an 80 to 90 percent reduction in F. This would lead to loss of the southern New England lobster industry; including market space, infrastructure. We do have Jonah crab, so that might be able to minimize some of the economic impacts; but we really don't know the magnitude of what that could help with.

Benefits of this objective would include improved recruitment, higher stock abundance; and to achieve this we could use a moratorium, a quota, a very narrow slot limit, or a long targeted season closure. The second potential objective is to stabilize spawning stock biomass. This would require a 75 percent reduction in F; again according to those projections that we saw in February.

We would expect large economic and infrastructure losses similar to those that would be seen with the 80 to 90 percent reduction. The goal here or the benefit would be preventing further declines in abundance. We could achieve this through a quota, a gauge size change, targeted season closures, trip limits, lower trap limits or a combination of all these.

A lot of the tools you'll see are the same for each of the different objectives; it is just going to be the magnitude with which you change those that is going to influence your goal in the end. Our third objective is a 50 percent reduction in F, and this is kind of the in-the-middle objective I'll say that the PDT was striving for.

It would allow a portion of the fishery to remain, but we would still expect slow declines of the southern New England stock. There could be some biological benefits, such as a few years of improved recruitment or adult survival if environmental conditions are favorable. But we would expect to see continued declines.

Then we're looking at the same tools here; gauge size changes, season closures, area closures, quotas, trap reductions. The fourth objective is to optimize egg production and the PDT discussed, and I think this is in line with what the discussion has been so far today; is that while we can't really control many of the environmental factors that have contributed to the decline of the southern New England stock, it is possible to implement management measures that optimize the number of eggs in the water.

If the board were to choose this objective, the goal would be maximizing the probability of a successful recruitment event when there are favorable environmental conditions. Basically hedging your bets that when the water is cooler or there are less predators, we'll have a good recruitment year.

To do this we want to leave as many spawners and eggs in the water, so this would be both an increase in the minimum gauge size and a decrease in the maximum gauge size. The PDT just cautions, we don't want a male only fishery. That is not something that we're trying to achieve with this objective.

The fifth potential objective is to perpetuate the fishery. This is a socioeconomic objective, and the PDT felt that any reduction in F between 10 and 40 percent would fall under this. We would expect the stock to continue to decline, but we would be able to preserve the fishery until it is no longer economically viable.

Again, we're looking at trap reductions, gauge size changes, area closures and season closures. The sixth objective here is more of an educational objective, I'll say. It seeks to learn about the success or failures of different management measures as they pertain to the southern New England stock; and really the lobster stock at large.

It can be combined with any percent reduction that the board might want to choose. How this would work is you would implement different

management tools in different areas; and an area could be an LCMA, it could be a state, it could be a smaller sub-region, whatever the board wanted. You would try and measure the impact of that different management tool to see what happens.

For example, if one area were to implement a season closure you could measure the size and abundance of lobsters in that area, the percentage of shell disease, things like that to understand what impact that management measure had on the stock. Then you could apply those learning's to inform future management decisions and also decisions that may come for Gulf of Maine and Georges Bank.

The PDT did have several concerns about the cost, time, coordination, and monitoring that would all be involved in this. But I think in general on the theory level, we all agreed that if this could be implemented it would help improve the knowledge we have on the different tools we use. As I mentioned, we also looked at standardizing regulations in southern New England.

Just to give kind of the overarching view on this, the PDT felt that standard regulations would ease enforcement and reduce uncertainty in stock assessments. We did talk about the fact that LCMA 3 now is coastwide, and so we would have to deal with that either through splitting it, through a line or creating some sort of southern New England designation.

Then a lot of the times you'll see on the slides it says that the management tools should be used in combination with one another. I think the PDT wanted to make sure that the board doesn't hedge your bets on one management tool; that we use these in combination to try and obtain whatever goal the board has.

First is season closures, we have three different season closures right now in southern New England in LCMA 4, 5, and 6. The PDT felt that season closures are an effective tool to reduce F,



and that closures would have the greatest benefit in June/July during the molt, or July/August when eggs are extruded. There is also the potential for staggered closures inshore and offshore, so that we could protect the lobsters as they migrate either inshore or offshore during the year. There is the potential for fishermen to recoup landings, and that would be by increasing their effort when they are allowed to fish. This is just something the PDT wanted to caution on. The next tool is trap reduction, this is the same graph, actually I stole it from Jason's presentation; but I wanted to give an idea of what one of these curves could look like. The PDT was a little concerned that the effectiveness of trap reductions to decrease F is limited and delayed; since the latent effort is removed first.

They highly suggested that this use be in combination with other management tools. They also wanted to highlight that trap reductions could impact the Jonah crab fishery now that we are managing those together. There is really a mixed crustacean fishery. In terms of minimum gauge sizes, we have two different gauge sizes.

The LCMA 3 gauge size is slightly larger. The benefit of increasing the minimum gauge size is that lobsters would be able to contribute to egg production before they are legally susceptible to harvest. But again the PDT did not feel this should be the sole management measure used, because then the fishery becomes dependent on new recruits, and if you have a poor recruitment year that will result in an unstable fishery.

Obviously as you increase the minimum gauge size you are going to increase discards; and this will increase the stress that lobsters encounter either through handling, temperature fluctuations and things of that nature; and that the increase in minimum size would have a larger impact on the inshore fishery.

Looking at the other side here we have maximum gauge sizes, so again LCMA 3 has a

larger maximum gauge size. The benefit here of decreasing the maximum gauge size is that lobsters are protected in perpetuity. If there was a uniform max size, this would address concerns about diminished conservation values as lobsters move from one jurisdiction to another.

They might be protected inshore and then they move offshore and they're susceptible to harvest. Again, we would see increase in discards and likely increases in stress. We would expect a decrease in maximum gauge size to negatively impact the offshore fishermen, and again this should not be the sole management measure used.

Finally we have V-notching. Right now LCMA 6 and state waters of LCMA 4 do not have a V-notch requirement. We do believe that V-notching protects spawners. But the PDT felt that this might not be the best tool to be using right now, since the effectiveness of V-notching really depends on substantial harvest and high rates of compliance.

If we're not seeing that high level of harvest, we might not see the benefits from V-notching in LCMA 6 and LCMA 4. The PDT also felt that they didn't want to create a de facto male only fishery; and again if the board wants to pursue this, it should be used with other tools. I'll take questions on the PDT report now. I still have LCMT reports to go through.

CHAIRMAN BORDEN: Questions for Megan?

MR. McKIERNAN: Megan, when the PDT talked about closed seasons, did they not link it to what was in the motion from last February's meeting, where we talked about the need for the closed season to enhance compliance and enforcement with trap tags?

MS. WARE: We didn't specifically talk about season closures in response to that motion. But that is something that we could do. I'm sure the PDT will be meeting.

CHAIRMAN BORDEN: Any other questions? I would just like to make an observation that one of the useful aspects of the PDT report is the fact that they are commenting on the fact that southern New England lobster fishery basically is in this transformation. Historically it was the lobster fishery with a bycatch of Jonah crabs; that's what it always was.

But now what you have, I mean the fishery right now, those two fisheries are worth about \$36 million to all the states up and down the coast; if you combine the values of them. Now what you are seeing is a transition out of the lobster fishery by these same boats, they are all permitted, they use the same gear, they fish in a lot of the same grounds; and they are transitioning into a crab fishery.

And in fact if you look at a lot of the NOAA assessment information out of Woods Hole, what you find is that there is a pretty pronounced increase in the crab population in their database, and in fact the crab population is expanding eastward across Georges Bank to areas that traditionally were not fished.

What we're managing, I think what we're going to talk about managing here soon, is really a multispecies fishery. It is just transformed in the last 20 years is what's happened. But just keep that in mind; any other questions? If not I'll move along to the LCMT reports. We had two LCMTs, one was Area 3, and one was Area 2; both got together with the state staffs and at least initiated a process to try to start to formalize recommendations for the board. I think it is important to review these.

MS. WARE: I just want to highlight, I was not actually at these meetings; so I am just kind of consolidating from what the meeting minutes said. If board members who were there want to comment that is probably a great idea. But LCMT 2 met on April 6; there were 20 people in attendance, including seven members.

I think the purpose and goal of these meetings was really to allow the LCMTs to review the stock

assessment and the TC reports to date; and then also trying to begin the discussion on future management and what they might like to see. The first thing that was discussed at the LCMT 2 meeting was mandatory reporting for all states.

This was tied to the February TC report that highlighted that there are data deficiencies in the lobster fishery, specifically for federal landings; and so they are suggesting mandatory reporting for all states. They submitted a letter on water quality and habitat, and I think Beth spoke to that a little bit earlier today.

That can be found in your supplemental materials. Given that they are currently going through a 50 percent reduction in traps, they are proposing that there be no minimum size increase or season closure in Area 2. I think some of this is tied to the fact that the current stock assessment does not take into account those trap reductions, yet they would like to see how those play out.

They did suggest or propose that there be a decrease to the maximum gauge size to five inches. However, this was not unanimous. They asked that the Lobster Board consider the southern New England stock as a mixed crustacean fishery. As an industry they said they would pursue funds for the tagging studies that Bob mentioned in his TC report. We also had LCMT 3 meet on April 8; there were nine people in attendance, six members. Then I also believe there were three e-mails from members who could not attend. What they're proposing is a six inch maximum gauge size; and this would be reduced by a fourth of an inch over three years. They are currently at 6 and 3/4 inches.

They felt that this was an appropriate maximum gauge size, given the fact that the lobster resource south of Hudson Canyon is significantly larger. This would be kind of a fair and appropriate maximum size for all of Area 3 in southern New England. Kind of piggy backing off of that there is a need to separate southern New England from Georges Bank, Gulf of Maine in

Area 3; and that is something that they want to highlight to the board.

They are currently going through a 25 percent trap reduction, and they are proposing expedited and continued trap reduction schedule. I have it up here what they are proposing. In 2016 they would do the 5 percent that is required. In 2017 they would bump it up to 10 percent; in 2018 it would again be a 10 percent reduction.

Those three years would be their 25 percent reduction. In 2019 they would take a break, there would be no reductions; and then in 2020 and 2021 there would be two more 5 percent reductions. In the parentheses there I have the potential trap caps. They are proposing that the trap caps be reduced in those first three years, but that they not be reduced in the additional two years.

They submitted letters on trap haul validation systems and the need to improve enforcement offshore, especially if we continue with trap reductions; and they also submitted a letter on water quality. Both of those can be found in your meeting materials. Then they wanted to highlight that there is this issue of some fishermen who go crabbing in southern New England, but then lobster fishing in Georges Bank. We need to think about how changes to the minimum gauge size would affect these fishermen. Those are the LCMT reports.

CHAIRMAN BORDEN: Questions for Megan? Yes, Peter.

MR. PETER BURNS: Thank you, Megan for the report. I was just curious about the trap reductions that the LCMT 3 has offered up. I noticed that they wanted to separate southern New England from Georges Bank and the Gulf of Maine. Now would those extended trap reductions include the Georges Bank as well, or is this just for west of 70?

MS. WARE: I believe it is just for the southern New England portion of Area 3.

MR. BURNS: Okay, thanks.

CHAIRMAN BORDEN: Peter, if I can just follow up on that; since I attended the meeting. I think there is going to be more discussion. Let me rephrase this. If the board decides to move forward with an addendum, which I hope they do, and identifies a clear objective to this addendum; I think that is going to then force a lot more discussion on the part of the LCMTs, in terms of exactly what they want to do, how they want to do it, whether or not there needs to be like a permit endorsement.

So that everyone is clear here, we've got Area 3 boats that are authorized to fish on two different stocks; one is extraordinarily healthy, the other one is overfished. If we end up with differential regulations, we're going to need some mechanism just to keep those two separate. We have two sets of regulations on permit holders that theoretically can move back and forth.

Those types of issues are going to have to be developed. But all of that has to take place after we do what I think we should do; is move forward with an addendum and have some clear goals. Then they can get on with that; anyone else here? We'll move on. Last item under the reports is the video.

This was per the request of Emerson, so we'll do the video. I'll let him speak. Then what we're going to do, as I announced earlier we're going to take about a five or six minute break. Everyone can go get a cup of coffee, and then we're going to start with the major item of business.

#### **DERELICT LOBSTER POT REMOVAL PROGRAM**

MR. HASBROUCK: Thank you for accommodating my request. This is a short video on a derelict lobster pot removal program that we've been conducting in New York over the

past five years or so. We've heard some discussion this morning about trap reduction. We may have fewer fishermen over the past 15 years fishing a fewer total number of pots; but what has happened with all those reduced numbers of pots?

There are still a lot of them in the water still fishing. These are derelict pots that we're removing. In the assessment information, at one point there were about 588,000 pots in southern New England, and now we're down to about 152,000 pots in 2013. What's happened to the approximately 400,000 pots? Where did they go?

Well, there aren't too many of them stacked up in people's backyards. I know a few were sold up in to New England, but not many. There are still a lot of them in the water. We've had this derelict lobster pot removal program. We've gotten funding through a couple of different sources. We've been funded a couple of times through the NOAA Marine Debris Program, and a couple of times through NFWF, the National Fish and Wildlife Foundation.

So far we've removed 15,000 pots out of Long Island Sound, the New York side of Long Island Sound. There are still an awful lot of pots out there. Those pots are still catching lobsters, and they're still contributing to mortality on the resource. We're working with the few current remaining lobsterpot fishermen in New York.

We pay them to take us out, we quantify all of the gear, bring it back to shore. It gets crushed and put in a dumpster and brought to a metal recycler so that it gets recycled. All of the rope and warp and so forth go to another partner called Covanta Energy, and they turn it into energy and they incinerate it. It has been a successful program. We've developed a grappling system to grapple for this gear. We go out and boats can hold about 75 pots safely, so that is what we collect on a trip. We go out and get our 75 pots; usually by mid-afternoon.

This is just some visual about the gear that we're removing as its being removed. Then that is just from a few numbers of trips stockpiled in the parking lot there at a town marina; crushed and put in the dumpster. I just wanted to bring that to everybody's attention that there is still a lot of gear out there and it is still catching lobsters. Thank you.

CHAIRMAN BORDEN: Any questions for Emerson?

MR. McKIERNAN: Yes Emerson, is data being collected on the status of the ghost panel on each individual trap as it comes up?

MR. HASBROUCK: Yes, yes, and for a lot of the pots we've found that the escape panel is I'm going to say compromised; which means it is not doing what it was intended to do. That can be due to a couple of factors. One is the pots will settle down into the mud. The longer they're there the further they settle into the mud, and we're able to determine when we haul them back if the escape panel has been obstructed by mud. Also the following organisms that grow on them tend to keep those panels from opening up. Then some still have the hog rings intact.

CHAIRMAN BORDEN: Anyone else? No one, okay so let's take a break. We're going to reconvene at 11:30. Just so everyone knows for planning purposes, we're going to have lunch outside the door; take about a 20 minute break. Everybody can have lunch; we're going to pick up a little bit of time because we're already behind schedule.

(Whereupon a recess was taken.)

CHAIRMAN BORDEN: Everybody have a seat please. As I indicated before, I was going to make a couple of comments. I think where we are at this particular juncture, we've got fairly, I think, clear technical advice. We've had five different technical reports that have really laid out what the facts are on the issue.

I would just like to summarize a couple of things so that the record is clear. These are almost verbatim, so that nobody thinks I'm putting a spin on this. The Technical Committee had basically done projections that have indicated that we need an 80 to 90 percent reduction in F to increase the SSB.

They've also done projections that indicate you need a 75 percent reduction in F to stabilize the stock. The impacts of changes of that magnitude are basically a fishery closure. I don't think that we should necessarily sugarcoat those alternatives; for lack of a better characterization. Then we've had, and Bob Glenn pointed this out, there are certain assumptions about natural mortality that have been built into some of the analyses. If the natural mortality is assumed to be 0.275 and that increases, then basically what Bob said is you are not going to rebuild.

You are certainly not going to rebuild to the thresholds that we've adopted; or if you want to put that in a kinder manner you could say, it is highly unlikely, never say never, but it is highly unlikely you're going to rebuild. Then you look at the way the fishery in southern New England has developed. Historically 2/3, and I just point this out as an example, 2/3 of the fishery in southern New England was derived from Long Island Sound. You can go back, David Simpson knows.

You can go back in time and look at the time series of data. New York and Connecticut landed 2/3 of the catch in the entire area. Given that fact and given the fact that the resource in that particular area is just a remnant of what it was; I think David at one of the previous meetings indicated that it was like less than 5 percent of historic rate in the area. It raises all these questions I think; about how much potential is there really to rebuild this stock? As far as the assessment, and this won't go on for real long but I think it is important for us to just be totally frank. As far as the assessment, my personal view is the assessment is the best assessment on lobsters that the commission has ever done. I

take my hat off to all the technical people. But that doesn't mean it's perfect.

I would point out; I've gone back, gone through all the technical reports. The Technical Committee has been absolutely candid with us and pointed out that we're in this really awkward situation, where the scientific advice, the best scientific advice is being generated by the states in water depths less than 200 feet.

That is pretty much throughout the range of the resource. The fishery, unfortunately, takes place outside that zone. This isn't a criticism of anybody in the room. I'm just trying to point out we've got superb biological information inshore, and we've got this deficit of information offshore. In one of the Technical Committee reports, they went on to itemize the deficiencies.

There is no larval or settlement surveys in federal waters outside of 200 feet. There is no ventless trap survey; at least comprehensive trap survey outside of 200 feet. There is little information on growth and survival of lobsters in deep water. If you look at the modeling efforts that the Technical Committee have done; and they've really done, I think, superb work.

They are making assumptions about growth and mortality out in deep water. I'm not saying those assumptions are wrong, they may very well be correct. But they haven't been validated is the problem. I think there are, at least my own view, there are major kind of data deficiencies we've had; in terms of the environment we've had really well documented environmental change in the interior inside areas, particularly in Long Island Sound, Narragansett Bay and Buzzard's Bay.

Those are the area with the southern New England stock with the primary juvenile generators. As the TC has pointed out that is where the best habitat is; if you want to raise lobster that is where the best habitat is. Compounding all of this we've got this whole issue of climate change. There had been a whole

series of model predictions that have come out here recently, talking about increases in water temperature three to five degrees in some of these areas.

Some of the predictions are most dire up in the Gulf of Maine. That is where the water temperature predictions are most pronounced. In terms of the data, the TC and the PET have identified about eight different data deficiencies that detract from their ability to do stock assessments. These are all easily fixable problems. I'm not going to itemize them in the interest of time.

But we've also had on a related front; the Technical Committee has identified nine different research needs. If we want to manage this resource we've got to get on with figuring out how to fund some of the research needs that they have identified. Bob and the TC put up a couple of examples on tagging studies, but there is a whole host of other studies that really need to be done if we want to fine tune this effort.

My conclusion, it's longwinded, but my conclusion from all of this is there are lots of problems. This is not a single problem. We've clearly got an overfished stock, but there is no overfishing taking place in the stock. But we've got multiple problems that we actually need to fix. My view is that if we initiate an addendum, I think everybody should look at this as the first step. I think there are going to be other things that we're going to have to do as a commission to address this. One of the big dilemmas that I talked to Doug Grout about with this, and there are a number of, all the different council members can probably think of individual species here. But this is not a single event, and it is an event that a lot of different councils are starting to wrestle with.

You've got climate change. The environment is changing. Normally what we would do is we would sit in a room like this or at a council meeting, and we would say it is overfished; you get the technical people to do some projections

and then we simply say, okay you've got ten years to implement those types of changes.

When we do that there is a cost. Everyone knows there is a cost to the industry; whether it is recreational or commercial. But there is also an expectation that we can generate benefits from it; that there is some benefit in the final analysis. All the technical reports that I have read on this basically indicate that there is no guarantee of a benefit.

I think the dilemma for the commission basically is, are we going to move forward and try to correct some of these deficiencies that have been noted and take steps; they may not go as far as everyone would like, but take steps to try to lay the framework for the lobster resource, should the environment change.

As Jason indicated before, the whole concept of that is to take steps that increase the likelihood that if the environment changes; maybe just maybe we get some decent recruitment out of it. But there is not guarantee with this. I think the first thing that we need to decide, I would like to just ask a question.

**CONSIDER TABLED MOTION  
TO INITIATE ADDENDUM TO ADDRESS  
DECLINING STOCK CONDITIONS**

CHAIRMAN BORDEN: Is there anyone in the room at the table that thinks that we don't need to do an addendum here? If you think we should just give up on the lobster resource, I think we should be blunt and say it on the record. Anybody just want to not do an addendum here? I just remind you that the subcommittee that included almost all of the states said you have to do something. They also gave the recommendation, don't shut the fishery down.

But there is a big expanse between those two perspectives. There is pretty much unanimous agreement we've got to do an addendum. Does anybody think the appropriate course of action here is to shut the industry down? As I said

before, this is a \$38 million industry. It is up and down the coast.

It is a multispecies industry. Does anybody think that is the appropriate course of action? Okay, so we're in the middle ground, gentlemen and ladies. We need to figure out a way forward. It sounds to me like we're committed to doing an addendum; so we don't need to debate that point. I think that the next step is to deal with the postponed motion.

On this, on the postponed motion just so everyone is clear. We postponed it; there were conditions that were built into the postponed motion. A number of those conditions have been met. A number of those conditions have not been met. This is not a typical situation where an issue is postponed. Some of the actions that were requested actually have already been acted on. For instance, sending a letter to NOAA asking for 100 percent VTR reporting; that is in progress. Peter told me before the meeting that we should have a response to that prior to our next meeting. I think the cleanest process here would be to put that motion back on the table and then my own view would be, since we've already acted on some aspects of it simply table it; and then have a completely clean slate so that anyone at that point could make a motion on how to proceed.

Comments on that process, does anyone disagree with the process? **If not, could I have a motion to place the postponed motion on the table? Bill Adler and Steve Train; any objections to placing that motion on the table, it is done by consensus.** Is there any discussion on the postponed motion?

MR. ADLER: Yes, I'm in favor of moving it back up on the table; because it is now the commission's motion, it is not the person that made it. I believe that is the way it is. The format would be to bring it back up onto the table.

CHAIRMAN BORDEN: Okay, but I asked whether or not anyone objected to having the motion on

the table. If there is no objection and the motion is on the table, you can debate the motion or modify the motion, substitute the motion; do whatever you choose to see fit. Are there any comments on the motion that is on the table?

MS. TONI KERNS: I think we just need to have that motion read so that it can be put up on the screen. Did you do a motion to bring this motion back to the table? **Okay, so moved to bring the postponed motion to the table, motion by Mr. Adler, seconded by.**

CHAIRMAN BORDEN: I was just trying to avoid a vote on it that's all. It was done without objection, put back on the table. This is a debatable motion, okay so that everyone is clear. You can act on it; you can make a motion to amend. You can make a motion to substitute. You can also table this motion if you want to move on to another motion. What is the preference of the committee?

MR. WHITE: I'm not quite sure where you're trying to go, Dave. Would you rather start a clean slate or would you rather try to work the motion that is now on the table?

**CHAIRMAN BORDEN: My personal preference would be to table this motion, just table it not to a time certain, just table it and then we would end up with a completely clear slate; and at that point any member around the table could make a motion to set a goal, okay?**

MR. WHITE: I'll make that motion, because I agree with you. I think trying to rework the motion that is there, we'll be here for days; so I think to start fresh. I will make a motion to table.

CHAIRMAN BORDEN: All right so the motion is by Ritchie White, seconded by Emerson Hasbrouck. The motion to table is non-debatable. Are you ready for the question? Do you need a caucus on this, anyone? Okay so are you ready to vote? All in favor raise your right hand, please; 10 yeses, no votes, any no votes?

Any nulls, any abstentions? **The motion to table passes.** One abstention; Terry Stockwell for the council. Tom, are you scratching the top of your head or you've got a question? Go ahead, please use your microphone.

MR. FOTE: I wasn't supporting the motion to be tabled personally because I'm saying we probably should have just voted this motion down and started with a new motion altogether. Are we going to bring this up? If you want to start off with a clean slate that would have been the easiest way of doing it. I'm a little confused why we're doing it this way.

CHAIRMAN BORDEN: Well, if I had asked our lead parliamentarian here, he probably would have said that there were a number of different ways that we could have handled it; and that was one of them. We've already taken an action on it; I think we need to move along. Megan is raising the question. Ritchie, was it your intent that this would be a motion to table indefinitely?

MR. WHITE: Correct.

CHAIRMAN BORDEN: Emerson, is that correct?

MR. HASBROUCK: Yes.

CHAIRMAN BORDEN: Okay so that is the intent, so the motion has been tabled indefinitely. Okay now anyone here has the opportunity to make a motion. Is there anyone around the table that wants to make a motion to define a goal for the addendum?

**MR. McKIERNAN:** I do have a motion and a lot of it comes out of what I thought was some of the findings that Jay had put up today, you know recognizing that there we are up against a lot in terms of the environmental and the economic factors. But I have a motion.

**The board shall initiate an addendum to minimize stock declines by lowering fishing mortality and increasing egg production by a combination of changes to the minimum size,**

**maximum size, closed seasons, closed areas, trap cuts and trap caps, standardizing regulations throughout the area and/or combinations of the above. Target egg production increase shall not be less than 40 percent above the level that would otherwise be produced with no additional management. Final regulations for this step shall be fully phased in within three years, no later than June 1, 2019.**

CHAIRMAN BORDEN: All right so that is a motion, do I have a second; Mark Gibson. Discussion on the motion; Ritchie White.

MR. WHITE: My problem with this motion is it doesn't say anything about maintaining the fishery. I think that is the main drive. If we're not going to take the road of moratorium, which we have already by your poll said we were not going to take. Then the main drive of an addendum starts with maintaining some type of fishery at some level.

I think that needs to be said in this addendum. Does a 40 percent increase in egg production allow for a fishery? I guess we don't know that yet. I would like to see, I don't have the wording that I would recommend, but the main drive I think is to have a fishery while still trying to allow an increase in stock abundance if environmental conditions allow.

CHAIRMAN BORDEN: Steve Train.

MR. TRAIN: While I'm going to support this motion, I still have trouble that I don't think we're going after the problem here. If you've got X settlement in X recruitment, they are both zero and you multiply it by 40 percent. Zero times 40 percent is zero. The problem seems to be getting that lobster from egg to Stage 5 or 6 or 7; and this won't do that. It is just like throwing more in on a wing and a prayer and hoping it works. I think we need to look at the problem and the solution, and not just keep crossing our fingers that cutting back the harvest is going to continue to help.



CHAIRMAN BORDEN: We've got Mark and then Tom Fote.

MR. MARK GIBSON: In my view increasing egg production, all else being equal, will give you more settlers. The survivorship between egg deposition and Stage 5 or 6s or whatever they're being called may have been reduced. But under reduced survival, if you're voting regulations in you still get more off the tail pipe. Not as many as we would have gotten when the survivorship was good.

But increasing egg production can't be bad relative to whatever conditions exist out there; unless there is some complicated compensatory mechanism that takes them away at even a faster rate than they're dying now. I think that eggs matter. We found that in our stock recruit analysis. Sometimes you have to peel away the veneer of other things that are hiding the stock recruit relationship, like shell disease or oceanographic conditions or whatever the case may be. But eggs matter. I support the motion and that objective.

CHAIRMAN BORDEN: I've got Tom Fote then David Simpson.

MR. FOTE: What I've been looking at is the number of lobstermen that have went out of the fishery. We have less boats than we had ten years ago. I don't have the figures on how many less traps we do. We talk about trap reduction, but we've done a trap reduction the last ten years that is dramatic in this industry.

I know we fish about a third of the boats that we worked ten years ago in New Jersey. I would like to get that as part of the fact that we look at what the states have done, what permits were available ten years ago, what people were fishing ten years ago, and what it was actually fishing now. I think we'll see a huge reduction in the number of traps out there and the number of boats out there and that consequence of that drop in fisheries; most of the species when we look at it, we don't have that affect.

Then we start reducing the boats and the traps; we've done all kinds of things to reduce boats and traps on paper, but I think there has been a dramatic reduction of the boats and traps that are fishing right now than there were even five years ago. We should look into that when we consider any of the moves we've done. That is part of the move that I'm looking at before I even start on this kind of an addendum.

CHAIRMAN BORDEN: I've got David Simpson, Peter Burns; Emerson, did you have your hand up?

MR. SIMPSON: My concern is with the target being egg production, increasing not less than 40 percent. My thought process driven by the information the TC has provided has been in terms of reducing exploitation. I don't know how those two relate necessarily. We have the projections that if we reduce the exploitation rate by 75 or 80 percent we can stabilize SSB.

I'm wondering why we aren't staying with some sort of SSB target increase. I'm also concerned that the focus exclusively on eggs sort of runs against the argument that we shouldn't promote a male only fishery. I can look ahead to the argument that would take advantage of that difference. It seems to me that has gotten us in trouble in the past with striped bass.

We suddenly, yes we used female SSB as the currency, but I didn't anticipate the conversation going toward males are expendable and females are all that matter. If I could have a little help with that why not let's just say SSB; because again maybe help from the Technical Committee, what is the difference if there is any?

MR. BURNS: This is a complicated problem and just looking at this motion here it makes me ask a lot of questions about where we're going to go. I think when we left in February we were in a conundrum about what the objective was. I think it is important for this board to move forward with some kind of measures that are

going to address the stock situation in southern New England.

Amendment 3 sets forth our objectives there to protect the stock moving forward. I'm glad we're here debating this motion and looking at a way forward on this. But I think that we should make it clear that if we do decide to go in this direction that this is only a first step. I think the hard work would come in subsequent meetings when we really have to understand what a 40 percent increase in egg production is actually going to mean.

I think everything should be on the table in that respect, and I don't think that this would necessarily mean that the fishery wouldn't have to go through some significant reductions in fishing mortality to achieve these goals. We've heard it in the Technical Committee reports, and all the other reports. The projections that the best way to increase egg production is through protecting your spawning stock biomass; which gets a little bit back to what Mr. Simpson just said.

Again, I think we need to take action here to really protect our stock and to move forward in a way that we can all agree on here. But I think that we should leave everything on the table here and perhaps not limit our options to just the management measures that are listed here on this motion; and expect to have to do some hard work coming forward when we get information from the Technical Committee and the PDT about how we're actually going to achieve these 40 percent egg increases.

MR. HASBROUCK: Well I certainly understand the intent of the motion, and realize that we need to start off some place here on this issue. I think we're setting ourselves up for failure here by saying that we're going to initiate an addendum to minimize stock declines by lower fishing mortality.

I think that no matter what we do here today or as we go forward, we're likely to see stock

declines take place; or at least that was some of the message that I got from the presentations this morning. I think the results of the ventless trap surveys, if I recall the information this morning are that over the next six or seven years we're going to be seeing decreased spawning stock biomass or maybe it was decreased catches or both.

I also think that what is going on with the North Atlantic Oscillation is we're in a negative correlation there for at least a few more years. Because of that negative correlation we may not see things improve at all in the lobster biomass. Again, I understand the intent here, but I don't know that we can commit to minimize stock declines; because I think that is going to happen no matter what we do.

MR. MCKIERNAN: Yes, to answer David Simpson's question, which I think went unanswered in the discussion. It is my view that decreasing fishing mortality, which is the first part of this, would inevitably leave more lobsters in the water. I'm suggesting that the focus of how many and what size lobsters we want to leave in the water should be dictated by a goal to increase the relative egg production by 40 percent; similar to what Jay showed in his analysis.

CHAIRMAN BORDEN: David I'll come back to you. I've got Mike and then Doug.

MR. MICHAEL LUISI: I'm completely supportive of the concept here and the direction that I think we all know we need to take regarding management of this southern New England stock. Where I'm uncomfortable, and it's been mentioned a couple times already, has to do with the 40 percent.

The reason why I'm uncomfortable about it is because I don't know what that translates to. Fishermen in my state, in talking with them, have told me that they're kind of dabbling on the line of what is economically viable for them to continue operating in this fishery. Having this 40 percent in this motion just makes me

uncomfortable; not understanding what that will translate to as far as management action.

I would think that in this addendum there could be a couple different scenarios or a couple different options or alternatives that we can actually look at the analysis to determine what a 10, a 20, a 30, a 40, a 50 percent value would translate to as far as management action. I want to support the motion, but I just have this uncomfortableness with kind of boxing ourselves in at that 40 percent level without understanding what that means.

CHAIRMAN BORDEN: Mike, just a follow up on that thought. Let me just share. I've had like two or three discussions with people about this general concept and this came up a couple of times. I think it is important for everybody to keep in mind that if, for instance this motion or some variation of it passes. It becomes a goal. It becomes the marching orders for the mechanisms within the commission to start to flesh out exactly what you want to see. In other words, this is just the first step. It would go to the PET.

Once it goes to the PET they will be analyzing in conjunction with the industry different alternatives to try to reach this objective. You'll get, I mean this is going to be a process that undoubtedly is going to go on for a couple of meetings. Every meeting you would get a report, basically to say we've analyzed this, this is what the impact is, this is what the industry and the LCMTs are recommending.

You would get kind of a combination of responses. One response would be from the industry. If you're going to take action to do this, we want you to use these mechanisms. Then what I would envision is, and then the PDT and the technical people would be analyzing it and presenting it back to the board. Eventually after you go through that type of process, we would be in a position to authorize something for public hearings.

MR. GROUT: In looking at this motion we start off by saying we want to minimize the stock declines by lower fishing mortality and increasing egg production; and it gives a variety of different management measures that we can potentially look at. But our target is 40 percent increase in egg production.

I would like to ask Bob Glenn, what do you think is going to be needed for a reduction in fishing mortality or a reduction in exploitation to attain a 40 percent increase in egg production along with maybe minimum size, and maximum size changes, et cetera? Do you have any kind of concept of what scale we're looking at here?

MR. GLENN: I don't have a great concept of the exact scale right now, but I'm doing a couple of back of the envelop calculations here. If we look at where SSB currently is, the spawning stock biomass is around 900. If you were to use that as a proxy for egg production, which as Dave Simpson pointed out, spawning stock biomass is probably a better metric to look at than egg production.

To get from 900 to increase that by 40 percent, you're looking at getting it to around 1,260. Then if I go to look into the projections to try to see what it would take to get it to a value of about 1,260; just give me a second. We're looking at an F reduction of somewhere on the order of 75 to 80 percent. But the tricky part about the motion, and this is something the TC would need some clarification on; is the 40 percent above the level that would otherwise be produced with no additional management.

If you look at the stock production projections, in the absence of any additional management; so we're at F of a considered 100 percent of what it currently has been, plus the existing natural mortality. We would expect the stock to decline extremely rapidly. It is that 40 percent above that level of doing nothing is kind of an ever decreasing moving target; so it is a little tricky.

MR. GROUT: Follow up, Mr. Chair. Clearly if we're looking at reductions in fishing mortality of that level, there is a question of, at least from my mind as to whether we're going to be as Ritchie White brought forward; are we trying to maintain the fishery here that way? This is clearly a decision that I don't think this commission has ever had to make before.

I commend the commission and the makers of the motion in putting this motion forward to try and do something, to try and help out in the hope that at some point we'll have some favorable recruitment conditions. I think as we already made the decision that we're not going to do nothing; but we also don't want to put in a complete moratorium.

This gets at the in-between. If this passes we're going to have to have the entire board work on some realistic goals of what we're trying to achieve here; other than just a 40 percent reduction. That is a good starting point, but I mean a 40 percent increase in egg production. But we also have to look at the aspects about what we're looking for in a fishery here.

MR. SIMPSON: I'm going to move to amend, to strike the sentence that begins with target egg production and insert instead target a 40 percent reduction in exploitation rate from the terminal year in the most recent assessment.

CHAIRMAN BORDEN: All right so we have a motion to amend; second on that? Is there a second? No second. Okay, let me just follow that up with a question. Do we have to – and this is to Bob Glenn – Bob, do we have the ability to determine exploitation rates on an LCMT basis?

MR. GLENN: No, we can only really with any reliability determine it for the whole southern New England stock. There are some sub areas where you might be able to do it, but you wouldn't be able to do it equally across all areas.

CHAIRMAN BORDEN: We can determine it for the stock as a whole, but not on the individual.

I've got Pat Keliher and then John. The motion to amend died due to a lack of a second. Well, Megan is encouraging me to ask for another second. I asked twice whether or not we had a second and no one raised their hands. I am declaring that the motion dies due to a lack of a second.

MR. PATRICK C. KELIHER: I think based on what Dan said earlier, I think this is starting to go in the right direction. I'm not totally comfortable with it, but my feeling is that the PDT is now going to have a fair amount of flexibility in starting to develop this; and we're going to have many more options to start massaging this and improving upon the direction of this addendum.

MR. CLARK: I probably just misunderstood something before, but I thought with the 40 percent egg increase from Jay's analysis; that could be done through a modest change in the gauge size. Yet what Bob just said to increase the SSB 40 percent we would need to reduce F by 80 percent, which based on what the PDT said would pretty much end the fishery. I must have misunderstood something there, but I thought the increase in eggs from Jay's analysis would not require such a drastic reduction in F to get there.

CHAIRMAN BORDEN: Jason, do you want to come up to the microphone and respond to that please?

MR. McNAMEE: Sure. I think an important thing to consider when talking about this is; I'll just get right to your question. The updated analyses that we did, keep in mind that they're based on a carapace length to egg relationship; which is not linear, it is a curve. It is not a linear relationship, so what we found, just to cut right to the chase, and again I caution you that it was based on feedback from the Technical Committee; but we've not brought these analyses yet to the Technical Committee, because we just finished them up recently.

With a single 1/32 minimum size increase in the inshore area, we can get that 40 percent if not more increase in egg production; and it has to do with the relationship of what you're protecting, the lengths of those animals, the maturity schedule. There is a bunch of interactions that are occurring; but that is what we found in our updated analysis so far. I'm not disputing what the calculations that Bob just made, I'm just offering these are the analyses that we've conducted and what we found.

CHAIRMAN BORDEN: John, have you got a follow up?

MR. CLARK: Just to that 1/32 increase in the gauge size would not result in a reduction in F by 75 to 80 percent?

MR. McNAMEE: I can't take it that far, so I can't link it back. From our original analyses we found about a 13 percent reduction in harvest in the inshore area; but there is more math that needs to occur. Again, the only thing that we've looked at thus far is messing around with the gauge. There are other things we could look at and make assumptions and do calculations as well on egg production. It doesn't just have to be the minimum gauge; but that was the idea with this, I put it in quotations "modest" was just it didn't take a lot to get to that 40 percent increase.

CHAIRMAN BORDEN: I've got Mike.

MR. LUISI: Thank you, Mr. Chairman. I'll hold my comment at this point. I do have a question or I want to make a point at some time after we take action on this motion, thanks.

MR. WHITE: A question for Megan. How will the PDT be able to determine how much mortality decline could be accepted by the industry and still be viable; because this gives no direction as far as the amount of mortality decrease?

MS. WARE: I think moving forward what we would do, if this were to pass we would work with the TC, but I would work with the PDT to try and turn that into some sort of different options

in terms of management. One thing that we are talking about or considered is meeting with the different LCMTs and they would come forward with their preferred option, I'll say, of how to achieve that. But I'm not sure it is the PDTs position to say what industry thinks is acceptable. I think that that is maybe something for the board to be considering. We would just provide the options.

CHAIRMAN BORDEN: All right, who else needs to speak on this; Mark Gibson?

MR. GIBSON: Since the boards concern and uncertainty about this 40 percent number, and I share some of that concern; because it is not completely clear how that target egg production increased maps back into the fishing mortality rate reductions. It seems to me that it is possible that if we're locked into that measure we could find ourselves in conflict with the other standards we have articulated here through your poll and in earlier meetings; that we weren't going to drive the range of this fishery into oblivion.

We also weren't going to do anything. We're trying to find a middle ground process. I would suggest to get more comfort with this motion, maybe we ought not to be holding ourselves to not less than 40 percent. Target could be 40 percent, but if those analyses, once the Technical Committee have looked at what Rhode Island has done, done their own updated calculations and reconciled the projections under F reduction versus the gauge increase effects.

We might be in a better position to know what that percentage egg production should be. I hear what the board is saying. I share some of those trepidations right now about not knowing how the numbers line up. I don't think I can amend my own motion, no one seconded, but that is what I would suggest that the not less than, so that 40 percent becomes a target that can flow out of the process that we're embarking on.

MR. ERIC REID: **I think I would like to make a motion to change the wording a little bit. In the first sentence where it says to minimize stock decline, I would like to insert long term; minimize long term stock decline. There is a lot of discussion about the dreaded 40 percent; reword that sentence to read, target increased egg production to be above the level that would otherwise be produced with no additional management.**

CHAIRMAN BORDEN: Do I have a second? Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: Eric, we just had trouble hearing your second part of that. If you could repeat it that would be great, thanks.

MR. REID: I was having trouble thinking about it myself as well. **The second part would be to reword the 40 percent target; that sentence to read, target increased egg production to be above the level that would otherwise be produced with no further management action. I realize it generalizes the motion; there is no target for the TC and the PDT to shoot at.** But I think it would capture the intent of this discussion.

CHAIRMAN BORDEN: All right, do we have a second for the motion? Seconded by Mike, discussion on the motion to amend, any discussion on it? Peter.

MR. BURNS: I appreciate the effort to try to make this a little bit more clear, but I'm a little bit more concerned; because this really kind of really says that any slight increase in egg production we would be meeting the goal here. Frankly, I'm not even sure if the 40 percent really even goes far enough.

Because I think we really need to take some effort to protect the stock any way we can. I understand that there are economic implications with this. But I think that we have to be prepared to make some very, very difficult decisions about how fishing mortality needs to be reduced to make sure that the stock doesn't continue to

decline at the rate that it is going right now; just food for thought.

MR. FOTE: My concern is when we were talking about moratoriums on winter flounder, when we were talking about moratoriums on weakfish, it left fishermen to fish for other species; to basically harvest other species to make up for the loss. When you look at lobstermen and lobstermen, there really is no other species to go to, maybe Jonah crabs.

Then we start crashing that stock. It is not as cut and dried as it is when you look at whether it is summer flounder or black sea bass when you talk about lobsters. It sets up a whole different class of problems, and that is what I'm looking at, trying to figure out how we're going to do that. I mean it is easy to sit here and look at it and say, we should be doing this and that; but the industry is going down without us doing anything.

There are less people in the fishery, there are less boats functioning, there are less traps in the water; and the response is, like weakfish, the stocks don't increase. The stock assessment is not showing any better no matter what we do. I am hesitant to take actions when we basically five years from now we'll say, no we put everybody out of business and we're not seeing any increase in the stock.

CHAIRMAN BORDEN: Anyone else? Dennis and then Doug.

MR. DENNIS ABBOTT: The time is 12:25. I think we would work better on a full stomach and give people time to think about what we're doing here, and come back after lunch and see where we're going to go with this amended motion.

CHAIRMAN BORDEN: I was going to attempt to get through the motion to amend and then immediately break for lunch, but I'm not averse to that; Dennis.

MR. GROUT: And neither am I. I was going to express a concept here. While I understand some of the boards concern with setting a specific percentage increase target, typically when we do management actions we produce a range of alternatives. I personally am a little bit uncomfortable with something so open ended as above a level that would be produced with no additional management.

I mean that could be 1 percent. There may be, and it may also help our PDT and Technical Committee if we gave them a range of alternatives. Maybe this is something that we could discuss over lunch, as to what might be the appropriate range of alternatives to go with.

CHAIRMAN BORDEN: The Chairman just winked at me, so I am going to admit defeat and we're going to break for lunch for 15 minutes.

(Whereupon a recess was taken.)

CHAIRMAN BORDEN: (first few words not recorded) ...one would be to limit the amount of debate on the motion to amend. We've had sufficient amount of time to actually discuss the pros and cons of the strategy and the language; so we vote it up or down. Then if we ended up with an amended motion or it fails, then there are some other people around the table that would like to offer additional motions.

That includes kind of minor things like adding the word southern New England to the main motion, so that it doesn't apply to the Gulf of Maine, and a few other things. On the concept, anyone here feel it is really important to add additional comments that have not been made yet on the motion to amend?

I would just as soon deal with that motion to amend, and then if someone else wants to make a motion to amend then they could do that. That way we won't have two motions to amend on the table, or a substitute motion; which is going to confuse things incredibly. Anyone else want to comment on this? Are you read for the

question on the motion to amend? Do you need a caucus, anyone need a caucus?

Okay so all those in favor of the motion to amend raise your right hand. Five in favor, opposed, five opposed; we're making rapid progress. Bob, what time did you say the cocktail hour was tonight? We may have to have an attitude adjustment hour before we finish the meeting. Are there any abstentions, one abstention, and any null votes?

**One null vote, so it is 5 to 5, motion fails. That motion is gone. Now you're back on the motion to amend.** Does anyone care to make a motion to amend? Bob, on procedure?

EXECUTIVE DIRECTOR BEAL: Just a procedural question, Dave. I think you need to announce. I think your intent there was that the motion failed due to lack of majority, is that correct? I don't think you directly said that in the record.

CHAIRMAN BORDEN: Motion fails due to lack of majority. I look forward to the Roberts Rules of Order presentation. Okay, so I saw our distinguished chairman had his hand up. Now he's got his hand over his face. Doug, do you want to take a crack, or do you need another minute?

**MR. GROUT: Okay I'm going to try this. It isn't completed yet, but I would like to make a motion to amend that in the first sentence we replace minimized stock declines with – I'll let Kirby catch up – replace minimized stock declines with address stock declines in southern New England.**

Then after that similar to the original motion to amend, we're going to remove the sentence that says, target egg production increase will not be less than 40 percent above the level that would otherwise be produced with no additional management; and replace it with, develop a range of long term increases in target egg production between 20 and 60 percent above

the level that would otherwise be produced with no additional management.

The intention here, Mr. Chairman, is to one, clarify that we're talking about southern New England. Get rid of the word minimize, and use the word address, and then to put in a range of long term increases in egg production that the PDT and the TC could analyze.

CHAIRMAN BORDEN: All right thanks, Doug. Is there a second; Pat Keliher second. Is there discussion on the motion?

MR. FOTE: Did I miss something in the stock assessment saying that New England is suffering poor recruitment for a couple years in a row? Why are we, basically northern range not doing anything or not part of this amendment? If we're looking at basically protecting all the stocks, shouldn't we protect all the stocks? Especially, they could get a jump on the problem we're having in southern New England if it looks like they're going the same way; so we're just kicking that can down the road for a couple of years. That is what it looks like it's doing to me.

MR. GIBSON: I appreciate all the efforts on this. I think this is an improvement. The board has, I think, clearly stated that we want to be centered in terms of the severity of the management response between a moratorium and not doing anything. I think this range now with that additional guidance, allows the PDT and the Technical Committee to see where the percentage ought to be in order for us to stay centered in terms of the management response. I think it's a helpful improvement. I don't know if the range is wide enough, but it is better than locking us in at a 40.

CHAIRMAN BORDEN: Anyone else? Mike.

MR. LUISI: I agree it is an improvement. I still have the same concerns I did earlier with the 40 percent, you know locking us in to a number. You know you asked the question early on, whether or not this board was interested in eliminating the fishery. It was clear that the

answer was no, this board isn't interested in eliminating the fishery. But I think one thing that we're going to struggle with through this amendment or at this addendum are determining what is going to eliminate the industry; depending on what state the fishermen are from, what their business operations are. Fishermen in my state have told me that 20 percent cut back in catch; you might as well have a moratorium.

I think we're going to struggle with coming up with alternatives and the impacts of those alternatives are going to be felt differently throughout the range of this southern New England stock. Again, I'm going to support the amendment. I think it is an improvement, but I still have some concerns over the numbers being in there.

CHAIRMAN BORDEN: Anyone else? David.

MR. SIMPSON: Yes, I still have the same confusion that I need some help with; either from Megan or Bob. Is the term egg production in any of our Technical Committee advice; anything that has been peer reviewed and approved to put in front of the board for management decisions? An answer to that and then I have a follow up.

MR. GLENN: No, not in modern times. The last time we used egg production I believe was in the 2000 assessment.

MR. SIMPSON: Right, so we're using terminology here that nobody knows what it means. I can't support the motion, because I don't know what it means. A further concern is the end of that sentence; above the level that would otherwise be produced with no additional management.

Does that mean as we work on this over the next two years and the stock continues to fall, what it would have fallen to, or is it where we are now or at the last assessment? I'm sorry, but this feels like we're trying to say we're doing something without doing anything. I think we



need something more clear, based on the stock assessments that the Technical Committee and the Peer Review Panel have put together for us.

CHAIRMAN BORDEN: Other comments on the motion to amend? Are you ready for the question? Need a caucus? Does anyone need a caucus? Peter, you want to say something? Caucus, a couple minute caucus. Ritchie.

MR. WHITE: A question on timing, Mr. Chair. If we pass this and it goes to the PDT, when would we see a report back from the PDT? Would that be in August or would it be later than that?

CHAIRMAN BORDEN: August. I mean if, so everyone is clear, and Mike was the one that raised this before. If some variation of this motion passes, it would be our intent to try to conclude some of the egg analyses that are undergoing – Jason said he’s already got a draft of that. Have the TC review some of that paper.

Have the PDT and the TC and the staff work to get comments on what this means. To go back to Mike’s question, about actually what does it mean? What are the options and so forth, and all of that would be reported at the summer meeting. Then at that point I think, the board needs to look at that advice and decide whether or not it is adequate. In my own view this starts the process. Any other points before I call the question? This is on the motion to amend. All those in favor signify by raising your right hand; ten in favor, opposed – one opposed; any abstentions – one abstention, any null votes? The motion carries. We are back on the main motion as amended, any further discussion on this? David Simpson.

MR. SIMPSON: Sorry to be a nuisance, but isn’t it in our rules that any management action we take be based on peer reviewed science, and that we have guidance on the science to support management actions? Because where I sit and based on what Bob Glenn just said, I don’t see that what we’re doing is in any way supported by the scientific advice we’ve been given.

CHAIRMAN BORDEN: I think I would defer to some of my, I mean Bob or Toni could probably answer this better than me. From my perspective, I think most of the time that either a commission or a council deals with that specific issue, they have a whole ranking of types of documents that they rely on in terms of giving technical advice.

One of the last items on that list is to have like a Technical Committee review the concepts and make sure that it is consistent with the program that it is being advanced for. I don’t, and Bob correct me if I misspeak. There is no requirement to just use peer reviewed science. Is that correct?

EXECUTIVE DIRECTOR BEAL: Now that I’ve spilled everything around me I’ll go ahead and answer. The guidance is really that the reference points and the foundation of the FMPs have to be based on peer reviewed science. But then, how do you achieve those reference points and all the analyses on different management measures and other techniques? Those usually are not peer reviewed.

They are run through the Technical Committee and others. I think this is in that gray area. The peer review clearly said southern New England needs some significant changes. How you achieve those changes I think, there is more latitude in that in the guidance documents from the commission. I’ll go the other way, the guidance documents of the commission don’t clearly say how you have to achieve the reference points, or what analyses you have to use to do that.

CHAIRMAN BORDEN: David, do you want a follow up on that?

MR. SPENCER: I do. The response from Bob Glenn was that the last time we used this terminology egg production was 15 years ago, 16 years ago. I don’t think anyone around this table knows what this means; because it is not in any

of the last two peer reviews, not in the last two stock assessments.

It is not in any of the advice or work that the Technical Committee or others have done up until now; except for some work that got done to be presented at this meeting that has not been reviewed by the Technical Committee. I still view that this motion is out of order and inconsistent with commission policy.

CHAIRMAN BORDEN: Anyone else? Mark Gibson.

MR. GIBSON: I think I understand what Dave is saying, but I think he's referring to the egg per recruit standards we used to use. Eggs per recruit are very different than egg production. This is population egg production; which is in some way proportional to spawning stock biomass, and I'm sure the Technical Committee can figure that out. But if not, the old standards of production of eggs on a per recruit basis, which has fallen by the wayside – I agree with that. But I don't think that is what we're doing here. I think we're acknowledging that SSB matters, because it is what produces eggs.

CHAIRMAN BORDEN: All right, Bob.

MR. GLENN: To me, that kind of brings up an interesting question, because essentially to me it seems what we're really talking about here is SSB. I'm not really sure what the intent of changing the terminology to egg production is; because you can't achieve a 20 to 60 percent increase in egg production without increasing the SSB.

I think it leaves the TC in a little bit of an awkward spot as to understand. I mean we can do it. We can multiply the spawning stock biomass by the maturity curve and by the fecundity, and come up with total egg production, but it doesn't seem to relate back to any of the reference points or management.

CHAIRMAN BORDEN: Anyone else?

MR. GROUT: Well in response to what Bob said, when I made the motion to amend it was off of the original underlying motion that talked about egg production. The original maker of that underlying motion, I was wondering if they had that same concern that it should be SSB. The value that we're looking for is actually SSB.

If so, I can't make an amendment to my motion. Maybe the original maker of the motion or some of the people on the other side of the table that have concerns about using this currency of egg production, would you feel more comfortable with SSB? Would you want to make that amendment?

MR. SPENCER: Yes, I think that is where we're sort of misleading ourselves; because I'm just watching how the vote is going. I think the proponents of this motion are looking to take less extreme action on the fishery; yet if you substitute spawning stock biomass where it now says egg production, you're in the realm of 80 plus percent reduction in exploitation. I can't believe that that is what the people supporting this motion intend will happen.

I think we need to find the correct term, one that is in our stock assessments and our peer reviews, in all the technical work we asked the committee to do back in February; and substitute in a target reduction in exploitation rate or spawning stock biomass, but a term that is used in the advice we've been given. None of us know what this means. I think we're all interpreting it the way we want to. But just looking at the votes it is clear to me that people do not mean to increase SSB 20 to 60 percent.

MR. ADAM NOWALSKY: To build on that point. I had supported the last motion, but I've really got to think about that now; hearing the most recent comments that in order to increase, if I heard them correctly, in order to increase egg production we need to increase biomass. That was what I heard most recently, I believe. The PDT memo says that just to stabilize SSB would

require a 75 percent reduction in harvest rate. If I put two and two together and I'm coming up with four, then to get any egg production, which I think is the point Dave is getting to, egg production increase is required in SSB biomass increase, which requires according to the PDT a 75 percent reduction in harvest rate; if I've heard everything correctly and put it together in my head correctly. If I haven't, please correct me.

CHAIRMAN BORDEN: Anyone else around the table? Jason, I don't want to put you on the spot, but since your staff has been doing the egg production analyses, do you have any comments you want to make at this point?

MR. McNAMEE: I'll make one brief comment. The discussion that is happening right now between – so the comments that to increase egg production you have to increase SSB is absolutely correct – or protect SSB, I think the currency that you're using is just math. They are related to each other, so if you call it egg production or you call it SSB, it is just math that you're talking about.

I will say an attribute of egg production is it recognizes that all lobsters are not equal. Bigger lobsters produce more eggs. Smaller lobsters produce fewer eggs. For instance, in menhaden we use eggs instead of SSB. It is not something that doesn't occur in other fisheries, and the reason for that is bigger animals produce more eggs and you're just trying to recognize that.

The only other thing that changes in this discussion, depending on the currency is you can get a bigger number from egg production. That number that equates to that bigger number for SSB, it is just a smaller number. I guess you're all talking about the same thing and it is literally a currency change that is linked through a relationship; and it's just math.

MR. MUFFLEY: This is the question I had when we were going through the technical reports. If you kept all else equal, from my understanding, you need to take a 75 to 80 percent reduction to

stabilize SSB. But I thought some of the technical analysis that the TC had done and that Rhode Island had done that shows some modest gauge size increases, does influence and increase SSB.

There is a difference, so if we do nothing and the only thing we're going to do is reduce harvest by some sort of scenario, and we do nothing else; no gauge size increase. Then we need a 75 percent reduction to do that. But if you do some management tools, a gauge size increase, a decrease, whatever maximum decrease. There are other avenues that don't require a 75 percent reduction. That is my take in the analysis.

MR. BORDEN: I'm got Ritchie White. Bob, do you want to respond to that?

MR. GLENN: I was just going to point out that that is absolutely correct. Any time you change the minimum or maximum size you're changing the exploitable stock. By increasing that you are going to increase SSB.

MR. WHITE: I still feel we're going about this backwards. We've said that we want to maintain a viable fishery, and then we go to trying to create measures that will help egg production spawning stock biomass, without knowing what a viable fishery is. Why aren't we starting with, what kind of fishing mortality reductions can industry stand and still be a viable fishery? Why aren't we starting there, and then okay that's what we can work with? That is the effort we can reduce; and then see what does that give us? It just feels like that we're doing these things; we have no idea whether any of them will come out with a viable fishery. I guess my question would be, who would we task and how would that unfold, for us to determine what a viable fishery would be. How much mortality reduction could they stand? Would that go to the PDT, go to the AP, Technical Committee? How would we determine that?

CHAIRMAN BORDEN: I'm not sure what the answer to that is. Maybe Megan or somebody else can offer thoughts.

MS. WARE: My thoughts if I was asked that question would be to go to the LCMTs and ask them what they could sustain as reductions in F; and then that would be your goal, basically. I don't know if that percentage would be equal among all of the LCMTs; so that is something that the board would have to consider. But that is how I would try and answer that question.

CHAIRMAN BORDEN: My suggestion here on a way forward is basically to curtail the discussion on it. We've had a good discussion. I think we should vote on this motion, but do it in the context that if this motion passes, then in fact at the next meeting we will get a whole series of reports.

We can get comments from the TC on it, we can get the analysis that Jason and his staff has been doing. We can get comments from the TC on whether or not they agree with or don't agree with the Rhode Island analysis. Then lay all of that before us, and depending upon the results of that then if there is a necessity to revisit this motion, we go back and revisit it at that point.

But at least we do so; I mean there have been a lot of really good points that have been made around the table about what is known and what is not known. But there is also a lot of speculation that is going on around the table. I think the only way to move forward with this is take a step, but it is under the assumption that if in fact the motion passes, then we're going to revisit the whole issue at the summer meeting. Comments on that; any comments?

MR. ADLER: If this motion passes there is going to be a development of a draft addendum; first of all is that correct?

CHAIRMAN BORDEN: I don't think we're ready for that, Bill. I think we're at the stage where there is sufficient uncertainty here in terms of the terms, what it means and so forth. That we

need to get more technical guidance, we need to see this Rhode Island analysis being completed; and then basically put it on the agenda.

Let everybody actually see what the analysis is at that point, what the actual egg production is that comes out of a few examples. I mean in the Rhode Island analysis, the initial analysis, I don't know whether this applies to the current analysis. But they had looked at a range of different options, not to advocate those options but to just use them as examples. I think that might be helpful in terms of answering some of the questions that have been raised.

MR. ADLER: In other words, if this passes we're not going to start drawing up an addendum yet; is that correct?

CHAIRMAN BORDEN: Correct. That would be my interpretation.

MR. ADLER: Okay, and so is there a charge to the committees you talked about to come back to us with whatever you just decided and then move on maybe? Is that the next step?

CHAIRMAN BORDEN: What I would say is, I'll reiterate what I said; basically that if this passes or some version of it passes, then because of all these uncertainties that have been legitimately raised that we analyze it, do our due diligence on the alternatives and then get reports on it.

Then basically decide, is this what we really want to do; and we do it from a factual basis. What that would mean is, to answer your question directly, Bill; was we're not going to start on the addendum between now and the summer meeting. What it would mean is that you do that after that point. It is going to take a couple more meetings to finalize this.

EXECUTIVE DIRECTOR BEAL: David, the wording of the motion is to initiate an addendum, but your interpretation of that is the initiation is actually the analysis and the work done by the PDT and TC to bring back to this board. It is not

drafting an addendum between now and August it is initiating the work of an addendum, and that is how you interpret that; is that correct?

CHAIRMAN BORDEN: Correct. Okay any other points? Are you ready for the question or do you need a caucus.

MR. LUISI: I have a quick question for you. Given the concern around the table surrounding this sentence that starts with develop. If someone were to make a motion to strike that sentence from this motion, because the issue had been amended before it is a different motion. It is a motion to strike a sentence rather than to change the wording. But would a two-thirds majority vote be needed in that case, in order to actually make that change? I'm considering that motion and I'm trying to figure out what would be required in order to strike that sentence.

CHAIRMAN BORDEN: Are you trying to reconsider a portion of a motion that has already passed or already been acted on?

MR. LUISI: Yes, I guess the intent would be the same that Eric's motion earlier that I seconded, I guess the intent is the same; so yes, I guess I am asking if we were to reconsider that it would require a two-thirds. I'm just kind of talking through it in my own head.

CHAIRMAN BORDEN: Bob, you want to provide some procedural guidance, please?

EXECUTIVE DIRECTOR BEAL: I'll try. I don't have the wording of the previous motion that failed in front of me, but it sounds like Mike is suggesting another motion to amend; which would be to strike the sentence that begins with, develop a range of long term increases. If I remember right, his previous motion had a few other ideas in it as well.

You get into a gray parliamentary area where you've got a multi-piece motion earlier that failed, and now it sounds like Mike may be considering a single-piece motion to amend,

which is just striking one sentence. It probably would be fine if that is the will of the board just to do that through a regular motion to amend and not require a super majority.

CHAIRMAN BORDEN: Anyone further on this point? Is there any other action, anyone proposing anything different?

MR. NOWALSKY: I like in theory the idea of doing the analysis of what we're contemplating here would mean, and having that come back to us. I am somewhat troubled by the sense that the words on the board are, we are initiating an addendum. Then if the information, the analysis comes back to us and we don't like what we see, then we're going to un-initiate the addendum? I'm not very comfortable with that. I would be a lot more comfortable changing the wording of this from initiating an addendum to doing an analysis.

I would be curious, you know we had the question a couple a minutes ago and I got some nebulous response about how we're initiating an addendum, but only doing an analysis and might not go forward with the addendum. I would like to get some more clarity on that and then in consideration of possibly changing this, to having words to the effect that we're doing an analysis and not actually initiating an addendum at this point; if you could give that to me, please.

CHAIRMAN BORDEN: For the maker of the motion, and the seconder. Do you want to propose something different, given the comments here? What is your reaction? There is also the option to simply go with the way that I characterized it, in other words I think I was clear, I mean earlier in the meeting we agreed we were going to do an addendum. That is what we agreed to. There wasn't a vote on that. But people basically agreed to that.

MR. GROUT: Well the way I see this is we're initiating an addendum to address stock declines in southern New England by lowering fishing mortality and increasing egg production. We are

giving the PDT suggestions on a range of alternatives to include in there. Now if we come back and we want different range of alternatives to address the underlying problem, which is to address stock declines in southern New England.

We certainly have the ability as a board to ask for different ways to address that problem. But the initial problem is at the top sentence, and then the second sentence is one way of getting at it; and we're going to get the analysis. I don't see the way the Chairman has proposed that we're coming back with some analysis of how to address a problem in the first sentence is going to be locking us in to that way of addressing it.

We're going to take a look at the analysis, see if that is an appropriate way to address it, depending on what the PDT and the Technical Committee provides us. I think we should be initiating an addendum to address that problem. We've had a stock assessment that says there is a problem. We've had three meetings already. We've already asked the Technical Committee and PDT to do a variety of analysis that they've already brought back to us. I think it is time that we initiate an addendum to address the problem that is in the first sentence.

CHAIRMAN BORDEN: Adam, to your point. Would it make you more comfortable with the motion if in fact at the end of it we added some kind of sentence, and don't hang on every word. It is something to the effect of; the first phase of the process will be to analyze these options and report at the next meeting. Would that allay some of your concerns?

MR. NOWALSKY: Well I think the comments on the record here in the last couple minutes probably address it as best we can. If as Chairman you see fit, based on the comments here to encourage some change in words here – so what the public sees – and what we move forward with working off of. I would certainly support to that concern. But I think the important part is getting the comments on the record that we just did, about what our intent is

and what our process is going to be going forward. I would defer to you whether that is sufficient or not in your eyes.

CHAIRMAN BORDEN: Let me just read this one more time. It is my intent that if this motion passes that this will be the first phase in the process and that analysis will be completed and the report provided to the board at the next meeting. All right, further discussion on this; are you ready for the question? You need a caucus? **If not, all those in favor of the motion raise your right hand; 10 in favor, opposed – 1 opposed, abstentions – 1 abstention, any null votes? The motion carries.**

#### **GULF OF MAINE MANAGEMENT AND GEORGES BANK MANAGEMENT**

CHAIRMAN BORDEN: Okay so the next item of business here is Pat Keliher had requested time before the board to discuss the issue of the Gulf of Maine management and Georges Bank management. Okay so Megan has raised the point about tasking the TC. Is there any objection to tasking the TC with reviewing this? Bob, are you objecting?

MR. GLENN: Well, I think we need clarification of exactly what the final product is supposed to be. Are we analyzing what the impact on the fishery is at 20, 30, 40, 50, 60 percent increments? Are we changing based on egg production or are we looking at how that relates to mortality? I'm a little unclear as to exactly what we're supposed to be analyzing.

CHAIRMAN BORDEN: The motion says target egg production. I would view that the first thing you're going to do is you are going to review the Rhode Island analysis, right? Then I think you would factor that into a range of options and basically bring back some alternatives and characterize what you think the impacts are under a couple of different scenarios of that.

MR. GLENN: You want the Technical Committee to propose management measures to achieve those egg production changes?

CHAIRMAN BORDEN: No, I think it is similar to what Rhode Island has been doing. Rhode Island is not analyzing specific management measures, but they are looking at a couple of examples of the impacts. I think that would be helpful. It goes to a number of the questions that have been raised, Mike has raised questions about; what does a 1/32 inch increase do for this? What would a 2/32 inch increase do for this; those types of things?

MR. GLENN: My concern is that there is a myriad of possible different combinations of things. I think it would be helpful for the TC to have fairly specific guidance, so that we don't produce a lot of unpalatable options that folks wouldn't be interested in. We can stick with gauge increases if that is what the primary tool is going to be.

But I would think we would want to make sure that is what the board was interested in; as opposed to like in the beginning of that it says through maximum size, closed season, closed areas, trap caps. There is a whole huge suite in there. That would be a lot for the TC to analyze all those possible combinations and how they interact together. I am just a little apprehensive.

CHAIRMAN BORDEN: I'll kind of reiterate what I said before. I think a few examples; we don't want you to take the laundry list and go down and do every single one. But I think to the extent you can give us some examples of what this means; narrowly focused examples. Then the board at least can have some discussion about whether or not this is an appropriate objective for this action. Once we actually do that then we can start to flesh out the management measures.

I mean the whole context for this action has always been that we need a clear goal, okay, and I'm not sure we have it yet. We need a clear goal. Once you get a clear goal then you can basically

start the process of working with the PDT, working with the LCMTs to flesh out which alternatives we're going to consider. At that point they get analyzed. Yes, Craig.

REPRESENTATIVE MINER: I am kind of perplexed at this point, because when I hear from folks that are charged with coming up with information that we're going to take out to the public and they're confused. Now I feel like I'm in good company. This is the first time in the time I've served on the ASMFC where I communicated with lobstermen prior to coming down here.

I sensed a real concern on their part about the resource, and that was pretty telling to me. I am pretty sure it was probably similar to a conversation you might have had with an Indian about bison a long time ago. There may not be any left. I am not a scientist. I couldn't tell you what this says.

But what I can tell you is when I have to go back and relate what this says to somebody that is in the industry, I can't imagine they are going to think I did my job. I don't know how we unwind this clock or if we can unwind this clock, but it just seems to me that it's got to be very direct. I don't know whether we should close the fishery.

I mean I listen to Ritchie White, and I would say to you, Ritchie that most of the lobstermen in Connecticut, their business is down now down to about 10 percent lobsters, 90 percent moving buoys, doing any number of other things; just so they can stay in the business. Now whether we can get an agreement between Rhode Island, New York and Connecticut about what all those lobstermen do, I don't know.

But what I do know is that they know where these lobsters are, and another year where they know where they are and we haven't done anything there is going to be less of them the next time we go to talk about it; and that is my frustration. I don't know what to do, but I drove all the way down here because I thought we were going to do something. I respect the

people that know a lot more about how to draft this than I do. If this was legislation I would know how to draft it. Sorry.

CHAIRMAN BORDEN: All right, are there any other motions to follow this one? If not, we're going to move on to the next agenda item. Pat Keliher.

MR. KELIHER: Obviously things in the Gulf of Maine are quite different than they are in southern New England. The intent of what I am going to bring forward today is to hopefully avoid the conversation that we just had for the last several hours in the future when we start to see changes in the Gulf of Maine. This is not to diminish the importance of the southern New England lobster fishery, but to put it in perspective. If you look at today's landings, Maine during the peak of the season catches the total amount of what is caught in southern New England in about 14 days. Our fishery is at an all-time high. We've been maintaining catches for the last four years over 120 million pounds. Ex-vessel value is now a half a billion dollars. What I am proposing to make for a motion is to start putting together plans now for what is inevitably going to be a changing lobster stock in the face of a changing environment.

Just as a reminder, the current FMP reference abundance is 35 million pounds. If we did not react to the change until we hit that 35 million pounds level, the state of Maine would have an economic disaster on our hands that would pale all other fisheries disasters that we have seen in the past.

We are seeing shell disease within our state fisheries, it remains prevalent, but luckily we are at a low level and it makes up less than 1 percent of the harvest. However, we do see – and this correlates exactly with what the conversations in southern New England – while we have a historically high spawning stock biomass we have now seen four out of five years in declining settlement within our state settlement surveys.

We for the first time have picked up that decline in eastern Maine in our ventless trap surveys. That is a continued indication that we are starting to see change. I am not by any means suggesting that the sky is falling yet, but with the lessons learned in southern New England, I believe now is the time to start preparing with having the best available information and the best thought out process by which we would adapt to those changes.

Anecdotally, fishermen up and down the coast are telling me on a daily basis that things are changing. This fishery is moving farther offshore, we were seeing earlier sheds, the water temperature issues continue to drive all of the changes that we're seeing within the Gulf of Maine with all of our fisheries; whether it is green crab infestation, sexually maturing lobsters at a smaller, younger age.

All of those pieces are kind of part of what lead me to be very concerned about what the future will be to this fishery within the Gulf of Maine. With that Mr. Chairman, I would like to make a motion, a tasking motion if you will; and I'm hesitant to do so after the last conversation and the workload that was just put onto the Technical Committee, because Bob is about ready to crawl under the table I think right now.

Megan, do you have a copy of that? I don't know if you could put it up. **I would like to make a motion to have the Technical Committee examine the following tasks. Synthesize current literature and studies which investigate the connectivity between the Gulf of Maine and Georges Bank stock and Canada.**

**Plot changes in distribution of egg-bearing females over time in the Gulf of Maine and Georges Bank stock. Understand changes in the Gulf of Maine ocean currents and how this could be affecting larval supply patterns. Investigate the stock-recruitment relationship in the Gulf of Maine and Georges Bank stocks.**



**Review ongoing research on Gulf of Maine lobster in order to identify research holes and prioritize the importance of these data holes to effect management. Examine the competing management measures between Area 1, 3 and the outer Cape Cod to look at the benefits of harmonizing these measures. And lastly, to investigate and develop a Traffic Light Analysis as a potential control rule using average harvest and abundance values from the last ten years as a baseline. This approach would include using multiple indices such as the settlement and ventless-trap surveys, trawl-survey data, landings information, and other indices as recommended by the TC.** If I have a second, Mr. Chairman I would be happy to speak further on this.

CHAIRMAN BORDEN: Second by Ritchie White. Discussion, any discussion, no hands up. Tom, are you scratching your head again or is that a hand up?

MR. FOTE: I just wanted to support this motion. I think it is the right move to make and I really congratulate Maine for stepping forward.

CHAIRMAN BORDEN: Yes, I would also speak in favor of this. I think it's a good idea. I think the commission, given the experience in southern New England from the nineties; where we went from literally record abundance and catch rates that kind of rivaled some of the catch rates that Pat's fishermen are seeing.

We went from there in a very short period of time to the fishery had basically collapsed. I think it's important for the commission to do this. A lot of this will result, if you approve this, a lot of this will result in the design of research projects that have to be done to gain additional information on it.

MR. ABBOTT: What might be an appropriate timeline to gather all this information?

MR. KELIHER: I was thinking that preliminary information could start coming back at this

winter meeting. I don't think, as I said earlier the sky is not falling. But I think starting to bring this information together now, especially some of the prioritization work that needs to be done; I think would benefit us in state in particular.

We're getting ready to hire on two new research scientists. I think it would also allow us to start as a commission, prioritize research work that is needed, and start looking for additional funding, and maybe even get the service to elevate this on their priority list.

CHAIRMAN BORDEN: Any other discussion on this? Any need for a caucus? No hands up, are you ready for the question? **All in favor signify by raising your right hand, 11 in favor; oppose, any opposed, any abstentions, 1 abstention, null votes – motion carries.** Okay next item on the – it is almost exhilarating to make this progress like this.

#### **DRAFT ADDENDUM I TO THE JONAH CRAB FMP**

CHAIRMAN BORDEN: The next item on the agenda is the Draft Addendum I to the Jonah Crab FMP, this is a final action. This deals with the issue of bycatch in two different categories, and Megan is going to give a short review and then we're going to get some comments from other individuals. Then there is a motion that's been prepared on the issue.

#### **REVIEW OF OPTIONS**

MS. WARE: Before we get started could I just ask Mark Robson and Mr. Gwin to come up, because they'll be helping me with this presentation. All right, good afternoon everyone. Just as a reminder, as David said this is final action. This document went out for a public comment this spring, so I'll be going just quickly through the different options. I'll focus on the public comment and then we have an LEC and an AP report. Then we can open it up for discussion. Just an overview of my presentation today, first I'll go through the timeline of this addendum. I'll review the two issues; we'll go through public

comment and then approve it. This addendum was initiated in November, after concern that the current bycatch limit is too low; that it doesn't include all participants in the fishery.

The board approved the document for public comment in February, and they also added a second issue to address bycatch by non-lobster trap gear. Public comment closed just a few weeks ago, and we are now here to consider final action. This is the regulation that is currently in the FMP. It says there are 200 crabs per calendar day, 500 crabs per trip, and incidental bycatch limit for non-trap gear. Again, those are those gillnetters, trawlers.

There were two concerns that have come up. The first is that the limit for non-trap gear does not include all participants; that we need to increase it so that those individuals can carry on business as usual. The second issue is that there is no limit right now for non-lobster trap gear; so those will be conch pots, fish pots, and this could lead to increased effort as well as trap proliferation since some of those fisheries do not actually have a trap limit like the lobster fishery does.

I am going to start with Issue 1 first, non-trap gear, just briefly go through the data then the options; I'll switch to Issue 2. This table here shows the landings by non-trap gear of Jonah crab from 2010 to 2014. Then it shows the percent of trips that were over the current limit. This was updated actually from the public comment that was received from the New England Council.

Originally we thought that there were 23 trips over the limit, but now it looks as though there have just been 8 trips over the limit between 2010 and 2014. Three trips landed over 900 crabs between May, 2013 and August, 2015. In total the landings from the non-trap gear is less than 1 percent of the fishery, but we can see we had a higher year in 2010; but since 2011 we've increased from roughly 3,000 pounds to 13,000 pounds in 2014.

There are three options for Issue 1; the first is status quo, so that would be preserving the 200 crab per day, 500 crabs per trip limit. Option B is to increase it to 1,000 crabs per trip limit; and this would be a trip of any length, and then Option C would be to remove the bycatch limit. Moving on to Issue 2; non-lobster traps.

This data is just again for review, it is from the BTR database. From May 1, 2013 through August 31, 2015, there were 194 trips that landed Jonah crab with non-lobster traps; 60 percent of these trips had 200 crabs or fewer, 20 percent of trips landed between 200 and 500 crabs, and 20 percent of trips landed more than 450 crabs.

We have four options here, and I just wanted to include the exact language of who this issue applies to. It applies to all trips by vessels hauling traps which do not have a valid lobster tag. I just wanted to be clear on that; because I'm not sure that that has been clear before. But Option 1 would be status quo, so there is no bycatch limit.

Right now these individuals are required to obtain an incidental permit from their jurisdiction, but they can land as many Jonah crab as they like, with as many traps as they like. Option B is a limit of 200 crabs per day, 500 crabs per trip for three days or longer. Option C is a limit of 200 crabs in the first 24 hours and then any trip longer than 24 hours they would have 1,000 crab limit. Then Option D is a limit of 1,000 crabs for a trip of any length.

#### **PUBLIC COMMENT SUMMARY**

MS. WARE: I'll move right on to public comment and then I'll take questions after that. We received 7 letters, 3 from individuals, and 4 from groups. Then we had 7 public hearings; they were held from Maine to Maryland, and roughly 55 people attended those public hearings in total. For Issue 1, non-trap gear the table here looks at who was in favor of which option for both public hearings and written comment.

You can see looking at the totals it is basically evenly split between the three options. What I'm going to do is just kind of go over the rationales that people had for the different options; since they were generally the same. For Option A, those who supported the current 200 crab per day, 500 crab limit; they generally felt that this was an adequate allowance and this would prevent non-trap fishermen from targeting Jonah crabs.

Those who supported the 1,000 crab limit felt that this was a slight increase. It would allow people to continue business as usual, but at least it created some sort of limit for this gear. Then those who supported Option C, which is no bycatch limit, felt that there really wasn't a need to limit such a small portion of the fishery; especially when lobster permit holders who are the major harvesters in this fishery aren't limited in the number of crabs that they are landing.

Those were kind of the general rationales behind each of the different options there. Moving on to Issue 2, we had two clear winners here; Option A and Option B. Those who supported no bycatch limit again felt that there was no need to limit such a small portion of the fishery. They didn't feel the stock was in jeopardy, so there was no need to be restrictive at this time.

Option B, those who supported the 200 and 500 crab limit felt that there was concern about trap proliferation from these gear types; that it was important to set a limit that would allow some catch, but would be sure to cap effort. Just some other comments we got on the document. We had one individual say that clarification is needed on whether the addendum applies to bycatch landings or a possession limit.

We had people say that the Jonah crab fishery should adopt LCMA's. There is continued confusion on the difference between Jonah crab and rock crab. We had some people say claw landings are an integral part of the fishery, and some say that a claw fishery would be a

detriment to the stock. Then some people feel that the FMP should be paused until there is a completed stock assessment.

#### **ADVISORY PANEL REPORT**

MS. WARE: I am now going to turn it over to Mr. Gwin, who is the AP Chair for Jonah crab to give the AP report.

MR. EDWIN GWIN: Yes, well the AP decided or came to a consensus that it was probably good to have a thousand crab limit for everybody. That would allow an increase in the fishery, since the management plan is here to cap the fishery as it is; and that's with the participants. A thousand crab limit would still allow people that have landed Jonah crab to land them and still let an ex-vessel price of .85 to \$1.00; still be able to sell them and make a profit out of it.

Also with the Large Whale Take Reduction Plan, if we increased any effort and let the non-lobster trap people have the permit to catch Jonah crab; this might put more buoy lines in the water. I think we all agree that we don't want no more buoy lines in the water. Are there any questions?

CHAIRMAN BORDEN: Any questions on this?

MR. MCKIERNAN: Yes, Sonny, can you codify the position of the AP was to establish a thousand crab limit for those who do not have a lobster permit?

MR. GWIN: That's pretty much. If you don't have a lobster license it would be a thousand crab limit.

CHAIRMAN BORDEN: Any other questions on this? Bill.

MR. ADLER: Therefore, the AP on the non-trap fishery would support which option?

MR. GWIN: A thousand crab limit for everybody; for all trawlers, dredgers.

MR. ADLER: Per day?

MR. GWIN: Per trip.

MR. ADLER: Per trip and for the non-lobster trap a thousand again?

MR. GWIN: A thousand.

MR. ADLER: Not a thousand a day.

MR. GWIN: A thousand crabs per trip.

CHAIRMAN BORDEN: Both, so Bill, you're clear they're proposing same limit for both categories.

MR. GWIN: Exactly.

#### **LAW ENFORCEMENT COMMITTEE REPORT**

CHAIRMAN BORDEN: Okay any other questions? If not we're going to proceed with the Law Enforcement Committee report, Jon are you giving the report?

MR. JON CORNISH: Thank you, Chairman Borden. Good afternoon. The LEC met via teleconference March 11, 2016. This issue was discussed in depth. After reviewing the proposed bycatch options for the non-lobster trap harvest of Jonah crab, the LEC reiterates its previous positions and rationales for bycatch limits as prescribed in the memoranda of the American Lobster Board.

For Issue 1, the non-trap gear, the LEC supports Option A, status quo; 200 crabs per calendar day and up to 500 crabs per trip. For Issue 2, the non-lobster trap gear, the LEC supports Option B, 200 crabs per calendar day and up to 500 crabs per trip. Before the Jonah crabs were regulated there was no need to inspect bycatch as there were no restrictions in size or egg bearers.

Now restrictions will increase significantly. The time and effort required for law enforcement to inspect bycatch. In addition we are concerned with the larger bycatch allowances that could well increase the potential for gear conflicts

and/or add additional trap lines into the coastal waters. We also want to promote uniformity between the non-lobster trap and the non-trap bycatch fisheries. In this case we feel they should both be 200 per day, 500 per trip. I'll take any questions you may have.

#### **CONSIDER FINAL APPROVAL OF ADDENDUM I**

CHAIRMAN BORDEN: Any questions for Jon?

MR. STOCKWELL: Not necessarily for Jon, but perhaps for Megan. I just note in the LEC report where we have Option A of the 200, 500. In her presentation Option A was no trip limit. Just when we go to put motions up on the board, we ought to be clear exactly what we're going to either move or substitute.

MS. WARE: I believe Option A for non-trap gear is the 200, 500. Then for Issue 2, it is Option A. The different options for those two issues, even though some of the options are the same they do not correlate to the same letter.

MR. STOCKWELL: I'm even more confused.

MS. WARE: How about I go to the very last slide, it is a summary slide; and this shows all the options here. You'll see that some of the options, like Option C for Issue 1 and Option A for Issue 2 are the same; but they are a different letter. Okay.

CHAIRMAN BORDEN: Terry.

MR. STOCKWELL: I'm all set, thanks, David.

MR. LUISI: Just to be clear, A in both cases is the status quo; correct in your summary slide?

MS. WARE: That is correct, yes. Just one comment to add on this last slide, one thing I wanted to add is throughout the public comments and the written comments, one of the patterns I've seen is that whatever option the board chooses or whatever option that public commenter's supported; they supported the same value for both non-trap gear and non-

lobster trap gear, kind of citing ease of enforcement, ease of regulations. They are supporting the same bycatch limit for both non-trap and non-lobster trap gear.

CHAIRMAN BORDEN: Anyone else? Bill Adler.

MR. ADLER: I personally think, I actually support the 200, 500 for non-trap and the 200, 500 for non-lobster trap. The Law Enforcement Committee did make a comment on was if you give non-trap higher catches, like the scallopers or the draggers; that the gear conflict issue, they may really start to want to catch this more directed than others when they can catch that much.

To usually do that they will usually try to target where the crabs are, which is where the lobster traps are. I can see a gear conflict issue developing. I'm also concerned that with the higher limits there will be a more directed fishery by anybody, which once again means more traps perhaps going out if they're trapping them.

That is a problem with traps. If they do a directed fishery, I also don't think that the non-lobster trap fishermen need a thousand pounds in one trip. I don't think they could do it. That is why I sort of like the 200, 500 idea; and yes I do like the fact of having both the same rather than having a different rule for this one and a different rule for that one. That is my thoughts and concerns about this.

CHAIRMAN BORDEN: Anyone else? Jim.

MR. GILMORE: When you're ready would you like a motion, Mr. Chairman?

CHAIRMAN BORDEN: All right so Jim requested the floor to make a motion.

**MR. GILMORE: Move to adopt under Issue 1 for the non-trap gear bycatch Option A; 200 crabs per day, and a 500 crab per trip limit. Under Issue 2, Option B; 200 crabs per days, and a 500**

**crab trip limit for Draft Addendum I to the Jonah Crab FMP.**

CHAIRMAN BORDEN: Is there a second? Seconded by Bill Adler. Discussion.

MR. STOCKWELL: It is probably going to be no surprise that I have a little different opinion from my friend across the table here and sort of my comments are going to be just specific to non-trap landings. I came to this meeting prepared to either support Option B or C. After reviewing the meeting materials and further considering all the effort data the council staff mined from 2010 to 2015, which indicate the landings by non-trap permit holders constitute a fraction of 1 percent.

I am quite tempted to move Option C, the no landing limit, as I believe there is no evidence that provides a need for non-trap bycatch limit; when the vast majority of the trap fishery is not limited altogether. But with the absence of a Jonah crab assessment, and in support of the APs recommendation and my intent to freeze the footprint of the existing non-trap fishery; I'm going to move to substitute Option B, 1,000 pounds trip limit. If I get a second I'll provide further rationale.

CHAIRMAN BORDEN: I have a motion to substitute; seconded by Roy. We need to get the motion. Terry, can you restate the motion slowly so we can get it up on the board?

MS. KERNS: It's just which issue.

MR. STOCKWELL: My motion is to substitute Option B for the non-trap fishery. I am not prepared to address non-lobster trap fishery, because it is not the council's responsibility. The motion is specific to the non-trap fishery.

MR. GROUT: Just to be clear, is this a motion to amend? Jim's motion combined Issue 1 and Issue 2. I know you're trying to substitute, but really you're amending the motion under Issue 1 to be an Option B.

CHAIRMAN BORDEN: Terry, would you like to change the language on that to motion amend?

MR. STOCKWELL: Sure, I'll jump in with both feet here. **No, a motion to substitute for both the non-trap and the non-lobster trap; Option B of 1,000 pounds, which is consistent with the APs recommendation.**

CHAIRMAN BORDEN: Roy, on that point.

MR. ROY W. MILLER: That was my original understanding and why I seconded it; that it would be a thousand crabs for each issue, thank you.

CHAIRMAN BORDEN: I just point out the speed of the deliberations here has been breathtaking, and probably caught some of you off guard.

MR. STOCKWELL: To the point I made earlier, I just was confused about the labeling of the motions in the non-lobster trap. It's a different option, but my intent is 1,000 crabs per non-trap and per non-lobster trap. It would be a motion to substitute for consistency.

MR. LUISI: I am going to support this option. I think that it provides, like Mr. Gwin told us from the AP. It puts a backstop there for catch for harvest, but it doesn't restrict. I don't think the intention was to ultimately restrict the current catch. If I'm thinking back to the slide that Megan presented on catch over 4 or 500 pounds.

There was a proportion of the fishery that currently exists that falls within the range that would be restricted under the 200 and 500 crab option. With that and knowing that while we're learning more about this stock, this puts a significant backstop in to keep fisheries that aren't using lobster traps from expanding to any degree. I'm going to support the motion.

CHAIRMAN BORDEN: Anyone else on the motion to substitute? Brandon and then Dan.

MR. MUFFLEY: I'm going to speak in opposition to the motion, particularly on Option A. We have a measure that's in place that covers 99 percent of the fishery over the last five years. We're making the exemption for not eight fishermen; we're talking about eight trips over the last five years that we're going to make an exemption for.

There are no other requirements. They don't need to land anything else with this. They can go out and target if they wanted to. We can call it a bycatch fishery, but they could in theory go out and target 500 crabs per day and I also agree with consistency between the two; but my main opposition is to the opposition to A. I think we have it covered already, and I don't see the need to make an exemption for eight trips.

CHAIRMAN BORDEN: All right next on the list I have Dan and then Doug; anyone else? Steve.

MR. McKIERNAN: I agree with Brandon's comments and I would also want to point out that in my opinion, I think that this is going to attract more trap fishing effort by those fishermen who don't already have a lobster permit. If this motion fails, I would be prepared to do a substitute motion as a compromise to create a 200 per day, 1,000 for a five day trip as a substitute.

MR. GROUT: I am tempted to support the motion to substitute. I am a little puzzled by the argument that we're going to be attracting fishermen into the crab fishery; where right now the trap fishery, the non-lobster trap fishery has no limit on it. From what I've read in the document, it doesn't appear that there has been an increase in their effort; the same way with the non-trap gear in Issue 1. It doesn't seem like there has been an increase in their effort. Why would putting a cap on it increase, tempt people to get into the fishery?

MR. TRAIN: I would say I oppose the substitute motion at this point, because of the potential effort increase. We have trouble with bycatch definition here. We seem to think if you catch something that is below a limit it is a bycatch, we

don't care what else you're catching. I thought it was supposed to be a smaller portion of your total catch. I am worried about a directed fishery. It may only be eight or ten people at this point, but this would allow 200 people to direct on it up to 1,000; because it's a bycatch. I don't like the substitute motion for that reason.

MR. NOWALSKY: I might just ask staff to reflect that these are Jonah crab no Joan crabs in both motions.

CHAIRMAN BORDEN: All right, anyone else here? Are you ready to vote on the motion to substitute? I see no hands up. John, do you want to comment? Caucus; okay a two minute caucus, are you ready? **Ready for a vote, this is on the motion to substitute? All in favor on the motion to substitute raise your right hand. Seven in favor, opposed; 4 opposed, null votes or any abstentions; no null votes, no abstentions. The motion carries; the motion to substitute. Now the main motion as substituted, are you ready for the question?** All right is the motion clear?

MR. McKIERNAN: Will there be any discussion on this?

CHAIRMAN BORDEN: If you'd like to discuss it go ahead. I asked are you ready for the question and no one put their hands up. If you want to address the board, go ahead.

MR. McKIERNAN: I would like to, thanks. The rationale for a low trip limit, especially on the non-lobster trap fishery is to constrain the growth of a new trap sector. I don't think any of the agencies here at the table, at least I haven't heard plans to issue crab trap tags, crab trap limits, crab trap escape panels, crab trap escape fence.

There is a lot of work that is going to have to be done if we're all willing to open the door for 1,000 crabs a day fishery with things that look exactly like lobster traps. If you go down this road you better be prepared to do the work to manage this. Now in Maine, New Hampshire,

and Massachusetts, to my knowledge you have to have a lobster permit to land a Jonah crab. There won't be any new trap fishing boats, effort and administration of that fishery. But everywhere else, you are going to have to take on this burden; so please keep that in mind.

CHAIRMAN BORDEN: Are there discussion? Any other discussion, are you ready for the question; need a caucus on this? Nobody seems to want to caucus on it. **All those in favor of the motion signify by raising your right hand. Keep your hands up; 9 in favor, no votes; 1 no vote, any abstentions, 2 no votes, any abstentions, any null votes? The motion carries. Yes, 2 nos.** Are there any other issues on this? We then I think need a motion to approve the addendum as modified today; correct, Toni?

MS. KERNS: You need an implementation date and then roll call for final action.

CHAIRMAN BORDEN: All right you hear Toni. Someone care to make that as a motion? Anyone? Doug.

**MR. GROUT: I'll throw something out. Move an implementation date of January 1, 2017.**

CHAIRMAN BORDEN: Okay is there a second to that? Seconded by Terry, discussion on the motion? Is there any discussion on the motion? I'm not going to call the question until we have it up on the board so everybody can read it; any discussion, no hands up. I can see some people on that side of the table twitching.

MR. SIMPSON: My question was, the suggestion was implement January 1, '17 and what this does is liberalizes the trip limits. Is there any issue with implementing sooner than January 1?

CHAIRMAN BORDEN: I don't think so. I think the states have flexibility to do that; and in fact I just point out that Megan per my request has been keeping like a running tally of which states are doing what on Jonah crabs, and then we periodically send it out. Some states are just

feeding it into their internal regulatory process when it's convenient.

But everybody has got the same deadline. Any other questions, okay so you've got a motion on the board by Doug Grout, it's seconded by Terry Stockwell. Any further discussion on it, any need for a caucus? Seeing no hands up we're going to vote on it. **All those in favor signify by raising your right hand; I've got 10 in favor, no votes – 1 no vote, any null votes, any abstentions? The motion carries.**

I guess we have one more motion to do on this issue. We need a motion to approve the addendum as submitted today, and once we get that we'll have a discussion on it. Then we need a roll call vote; correct? All right, is there a motion?

**MR. GROUT: Motion to approve Addendum I to the Jonah Crab FMP as amended today.**

CHAIRMAN BORDEN: Second, seconded by Emerson, discussion, any discussion – no hands up? Are you ready for a vote; if you're ready for a vote, Toni or somebody going to call the roll, Megan? Bob.

EXECUTIVE DIRECTOR BEAL: If there is no objection you can do this through voice vote, but if you anticipate one vote or one state would object you probably need to go through the roll call. I'm not sure what your vibe is; but if you want to speed it up you can.

CHAIRMAN BORDEN: Anyone care to object to this? At least one person is going to object. We need to vote on it with a roll call.

MS. WARE: I'll just call the states. Maine.

MR. KELIHER: Yes.

MS. WARE: New Hampshire.

MR. GROUT: Yes.

MS. WARE: Massachusetts.

MR. MCKIERNAN: No.

MS. WARE: Rhode Island.

MR. REID: Yes.

MS. WARE: Connecticut.

MR. SIMPSON: Yes.

MS. WARE: New York.

MR. GILMORE: Yes.

MS. WARE: New Jersey.

MR. MUFFLEY: Yes.

MS. WARE: Delaware.

MR. CLARK: Yes.

MS. WARE: Maryland.

MR. LUISI: Yes.

MS. WARE: Virginia.

MR. JOE CIMINO: Yes.

MS. WARE: NMFS.

NMFS: Yes.

MS. WARE: New England Council.

MR. STOCKWELL: Yes.

CHAIRMAN BORDEN: **The vote is 11 to 1; so it carries.** Any other business on this issue, yes, Mike.

MR. LUISI: I wonder if Megan could just take a second to clarify for the record the issue regarding the control date that was in the original FMP. We had fishermen that qualified;



non-lobster trap fisherman that qualified under a control date to take part in this fishery. I just don't know how that control date now applies with the landings limits that we just voted on. Can you just clarify for the record?

MS. WARE: My understanding at this point now is that the control date is really going to be for the claw fishery, which we may be changing on the next agenda item. Right now that is what it applies to.

CHAIRMAN BORDEN: Any follow up on that by anybody? If not we're going to move on to the next item on the agenda.

#### **DISCUSS A NEED TO CREATE COASTWIDE STANDARD FOR CLAW LANDINGS**

CHAIRMAN BORDEN: Okay so the next item on the agenda is a need to discuss a coastwide standard for claws. In terms of this particular issue, in terms of the background, when we originally adopted the FMP we provided an exemption for New Jersey through Virginia.

Then subsequent to that the state of Maine and New York came forward and documented additional claw landings. I point out that we also had the New Hampshire Fish and Wildlife staff did an analysis of mortality in this regard. We've also received a letter from NOAA. With that as a little background I think what I would like to do is to take up the letter from NOAA. Alli, are you going to discuss this?

MS. ALLISON MURPHY: As you just said, following the February board meeting the Commission sent a letter to NOAA Fisheries, requesting preliminary guidance on allowing claw harvest in federal waters. Can you hear me better now? Following the February board meeting the Commission sent to NOAA Fisheries a letter requesting preliminary guidance on allowing claw harvest in federal waters.

We responded to that letter in late February, and that letter was included in the meeting

materials. Just to summarize what we said in that letter. We have biological enforcement and legal concerns with the claw only fishery. With regard to the biological concerns, I spoke at the last meeting about that preliminary New Hampshire study; saying that we believe it would be difficult to justify a claw only fishery, given the levels of mortality seen in that preliminary study.

Our enforcement folks have also weighed in, indicating that a claw only fishery would complicate the effective enforcement of the minimum size standards. These comments I believe are in line with what the Law Enforcement Committee said during their comments on the original Jonah Crab FMP.

Finally, as you all know, any federal regulations issued for the Jonah crab fishery must be in compliance with the National Standards that are included in the Magnuson Act. It may be challenging for us to issue regulations that include a claw only exemption based on the provisions that were in the original FMP; due to National Standard 4. With all that being said, we are definitely supportive of the Commission process and hope that an addendum is initiated that considers a wide range of alternatives on this issue.

CHAIRMAN BORDEN: Questions? Any questions for Alli? No hands up, okay thank you very much for the report. Okay so everyone is clear on this. Since we adopted the addendum and it did not restrict or constrain this particular activity; what we need to do here is basically promulgate an addendum, identify some options for the addendum, let it go to public hearing, and then bring it back at a future meeting. With that in mind, Jim Gilmore asked to address this. Jim.

MR. GILMORE: I think you covered most of the issues. The only thing I'll add is during the public hearings for Addendum I, we cheated a little bit and we asked some of the guys about the claw fishery. I think it further emphasized how much we don't know about this fishery. For instance, there is some seasonality to it in New York;

maybe only during the warmer months that they're actually harvesting claws.

There is also a gear component to it, some gillnet fishermen essentially have been certain times of the year; they are just taking the claws off of the nets. There is more to it than even we kind of understood. I think an addendum is appropriate, and I have a motion when you are ready, Mr. Chairman.

CHAIRMAN BORDEN: Any further discussion on this before we entertain a motion? If not, Jim, go ahead and make your motion, please.

MR. GILMORE: Are we going to do this live, or do you have this one written out for me? Are you ready, Kirby? Oh, there it is. I'll read it. **Move to initiate an addendum to create a coastwide standard for claw landings in the Jonah crab fishery with options to one, establish a requirement to allow only whole crabs be landed.**

**Two, establish a requirement to land only whole crabs, but allow a specified (volumetric) amount of detached claws per vessel trip which meet a minimum length of 2.5 inches. Proposed volumetric amounts may include the following: a single five gallon container, a bushel, or a standard fish tote. Three, allow the unlimited landing of detached claws, which meet a minimum length of 2.5 inches.**

CHAIRMAN BORDEN: You have a motion on the table, is there a second to the motion; Mike second. Discussion. Any discussion? No hands up. Are you ready to vote on this? Jim, are you all set? Are you ready to vote on this? Keep in mind the only thing you're doing is you're authorizing the development of an addendum.

Any need for a caucus? Is there any objection to this motion? Does anyone object? **No objection, motion is adopted by consensus.**

### **UPDATE ON NEFMC DEEP SEA CORAL HABITAT AMENDMENT AND ASMFC SURVEY TO AREA 3 FISHERMEN**

CHAIRMAN BORDEN: Okay so the next issue on the agenda is the ASMFC survey, Area 3 fishermen. Just as a little bit of background, the council is proceeding with a coral amendment.

As part of that effort they did a data analysis to look at impacts on certain user groups; one of which was the offshore lobster fishery. The result of that was that there was really very poor quality information in terms of landing levels in the area that might be affected. As a result of that the council staff in conjunction with the commission staff, Mass Marine Fisheries and others, put together a survey. I'm going to ask Megan to report on the survey.

MS. WARE: Just sort of a bit of brief background, but I'll go through it. On December 18, 2015, we received a letter from the New England Council requesting data on the distribution of offshore lobster fishing effort; specifically around the canyons. This request was related to the Omnibus Deep Sea Coral Amendment; which looks to protect deep sea corals either through discreet settlements of broad regional areas.

How does this coral amendment relate to the Lobster Board? The amendment may restrict bottom tending gear, and it is currently unknown how the lobster industry is going to be impacted. Lobster is not managed by or is not under the auspice of the Magnuson-Stevens Act, but the councils do have the authority to protect deep sea corals from fishing gear.

The most recent advice from NOAA General Counsel suggests that the council can restrict lobster traps. Just to give an idea of the area we're talking about here. There outlined in black are the different canyons, also seamounts. Then there is a blue line you kind of see going down out to the EEZ. It might not be as clear on the screen here, but there are actually three different lines that go through the canyons.

They represent a 300 meters, 400 meters, or 500 meters; and those are the potential broad zones that are being considered. I am going to refer to the council's area of interest quite frequently in this presentation, when I say that I mean the highlighted areas here, so the areas that are boxed out that are generally seaward of that 300 meter mark.

As David mentioned, we were asked to provide data on the effort that is occurring out there; but unfortunately the data right now is just too coarse. It is reported by statistical area, so we can't say specifically what type of fishing is happening in different canyons or the revenue associated with different canyons.

The purpose of this survey was twofold. It was to obtain detailed information on fishing locations and revenue, and also to provide a picture of potential impacts to the lobster fishery should lobster traps be proposed as restricted gear. A summary of this survey is going to be presented to the council's PDT and/or Habitat Committee, whatever we feel is most appropriate in discussion with the council.

I am going to go through the survey responses; they are just the highlights of the survey. The entire report on the survey responses is included in your supplemental materials; but I thought these were kind of the most important points. We mailed out 97 surveys to active Area 3 fishermen, and 34 of those were returned within the five week period; with a response rate of 35 percent.

Of those 34 that were returned, 19 surveys represented vessels that fish traps in the area of interest. Most of these fishermen that are fishing in the canyons were coming from Mass and Rhode Island. We had one fisherman from New Hampshire. This graphic, shows the locations fished. We have the different statistical areas in purple.

A darker purple color means that more fishermen responded that they fish in that statistical area. Then we have the different canyons in shades of orange. A darker orange color means that more fishermen said they fish at that canyon or in and around that canyon. All six of the statistical areas that span the council's area of interest were fished in 2014 to 2015.

The majority of fishermen were fishing in Statistical Area 525, about 74 percent; and this one has the most number of canyons, so maybe that's not surprising. The second highest one was Statistical Area 526 at 63 percent, which has Veatch Canyon. That was the canyon that was most fished in this survey, 19 of the 21 canyons were fished by respondents; so as I just mentioned the most popular one was Veatch at 42 percent. This was followed by Hydrographer and Atlantis. Chebacco and Filebottom were the two canyons that were not reported as fished. Another portion of our survey was to try and understand the depth at which fishermen are setting their traps. An open question in the survey is, what is your maximum depth fished. We got a range of answers from 220 to 549 meters, but it averaged out at 406 meters.

We also had questions that asked about fishermen's effort at different depth categories; and you can see those here ranging from less than 100 meters to greater than 400 meters. In general, most fishermen said that their highest percentage of traps allocated by depth was in that 200 to 300 meter range; and also 93 percent of the survey respondents said that they were fishing in that range.

We also asked about effort, so the trips that are being taken and the traps that are being hauled. This chart here is going to look at the average number of trips; the min, the max and the total, so it is not a depth category here. On average, fishermen who responded to the survey reported 30 trips per year to the area of interest.

However, there was a wide range from 15 to 49 trips reported. In total there were 570 trips in

2014 and 554 trips reported in 2015. The average number of traps hauled per trip in 2014 to 2015, and average of those two years was 1,779; but again there is a range from 1,100 to 2,600. Individual traps tended to be set at least twice in a single trip for 86 percent of the respondents.

One of the large sections of the survey was asking about revenue that is associated with both lobster and Jonah crab fishing in these canyons. On average 77 to 79 percent of an individual's lobster and Jonah crab revenue came from the area of interest. It shows that there is really a high dependence on these areas.

The average revenue per trip from lobster and Jonah crab was \$32,000.00. We were also able to look at the amount of revenue that's coming from lobster as opposed to Jonah crab. Breaking down the revenue by species, 88 percent of fishermen reported higher revenue from lobster as opposed to Jonah crab.

For these individuals the value of lobster was on average six to eight times higher. The total lobster revenue was between roughly 12 million and 13 million in 2014 and 2015, and then the total Jonah crab revenue from the respondents was between 2.8 and 3.3 million per year. We were also able to break out revenue by depth; so we can see on average 97 percent of an individual's revenue came from traps that were fished between 0 and 400 meters.

The highest average revenue, about 33 percent, came from the 100 to 200 meter depth category. Then finally, we were able to break down revenue by canyon. What you have here in the blue bars is lobster revenue, and the red bars are Jonah crab revenue. The bars represent how often or the percentage of times that that specific canyon was named as a top contributor to either lobster or Jonah crab revenue.

The top three individual canyons that contributed most to fishermen's lobster revenue were Veatch, Lydonia, and Atlantis. Then for

Jonah crab it was actually a seven-way tie; so seven canyons were named equally as often as top contributors to a fisherman's Jonah crab revenue. These included Alvin, Atlantis, Veatch, Hydrographer, Powell, Munson and Nygren Canyons. I'll take any questions, but I would like to thank Kelly Whitmore, Elizabeth Morrissey and Robert Glenn from Mass DMF for helping draft the survey, collect the responses and also analyze this. It would not have been possible without them.

CHAIRMAN BORDEN: Questions for Megan? Any questions? No questions that is a good sign. We're wearing them out.

MR. ADLER: First of all, I don't know if this is the place. In the comments that the council can manage lobster traps. Is this a change from when, several years ago, we were dealing with Closed Area 2; where the mobile gear had agreed to something and the council was able to rectify or put in the rule book? Whether they did or not I don't remember. They were going to put it in, because they could.

But then they turned to us and they said, but we can't put a rule in to tell the lobstermen out there that they have to stick to their side of the bargain, which the lobstermen in Area 3 had agreed to. We at the ASMFC had to put an addendum, I believe it was an addendum, in place that basically put the lobstermen on the queue that yes, you've got this schedule, this schedule and the ground fishermen, the council's handling them or NMFS is handling their side.

But the point here was that they had come and said, well we can't control the lobster side of things, but we want you to; and we did, we passed it. The other question on this coral thing that you just presented showed out in Area 3, way out. But if this is passed by the council and National Marine Fisheries Service that they have these restrictions out there for the coral out there.

What is to prevent an expansion of those closures, if that is what they do, to other areas other than what they're looking at right now? I mean, in other words if they pass this way out there in the middle of I don't know where, but they pass it. Then all of a sudden, well we passed this rule that does some restriction, but let's look at these other areas and then they start bumping areas closer to shore.

I don't know what the answer to that is, except I get worried that we opened the door. I don't know, Mr. Chairman where I'm going with this; other than the fact that I just wanted to alert that one thing was managing lobster traps out there and did something change from the way we did it before. The second is more of a concern that could any development on the coral side develop into an expansion in federal? I guess that's where I am and I'll say amen.

CHAIRMAN BORDEN: Bill, we're going to get into the coral discussion next. You're raising all valid points. I'll just add my own two cents. The way I would characterize this, your recollection of history is correct. The way I would characterize it is, there has been an evolving position by NMFS from, no you can't regulate lobster pots and the lobster fishery to now they basically have issued a legal opinion that says that they can.

But there are certain linkages as part of that and conditions as part of that that they have to adhere to. I have not gotten personally a detailed briefing on that aspect of the issue, but there are others in the room that have; particularly the New England Council leadership. I think this is a case where, this is my understanding, where an argument can be made that lobster pots may have negative impacts in terms of corals; and if they do, then the council within its purview has the right to restrict the fishery. That does not mean the council has the right to regulate the fishery. In other words, they can look at specific closed areas and those types of regulations. That is different than minimum sizes and all the rest of it. We still retain the right

to do that. I would point out; we work with NOAA as part of that. They are partners in that effort. They handle federal waters portion of it. I don't know whether any of the council members want to comment, Terry, on behalf of the council.

MR. STOCKWELL: I'm not going to add to Bill's comfort, but I am going to just follow up on your fairly complete summary. The NRCC, which is comprised of the New England, Mid-Atlantic and the Commission sought legal clarification for the management of corals; following the Mid-Atlantic's Coral Amendment and with the New England Coral Amendment coming up.

In the supplemental materials of the lobster board there is a significant amount of information that provided the context for this nexus. In order to move that ahead, our Lobster Board chairman was added to the council's Habitat Committee. The presentation that Megan just gave related to the deep sea canyons and the sea mounts is only part of what the council is contemplating for a future action.

There are some very large areas in the Gulf of Maine that are also being considered. We've got a long way to go between now and when we get close to finalizing on that. I guess the long and the short of it is, it is a partnership between the commission and the council as we move forward to protect corals; while still trying to incorporate the operational realities of the lobster fishery.

CHAIRMAN BORDEN: Any other comments on the survey itself? If not, I'm going to make a suggestion. The survey itself has not been distributed to the industry. My suggestion here is we take, say one month. We allow any of you that want to review the survey in more detail the opportunity to do that; and submit whatever written comments to Megan that you might want to do.

In addition to that I would suggest, and our association can probably help with this, we'll distribute copies, either us or ASMFC. We can

take the list of permit holders and mail a copy of the survey out to all the permit holders and let them read it and review it. If they want to make comments in the same timeframe they can.

That way we'll have the benefit of everyone here reading all of the details, and allowing the industry to weigh in on the comments. Then when we formally submit whatever we submit to the council, we'll have the benefit of both perspectives. Does anybody object to doing that? No objections, okay so we'll handle that. Let me just say this; that if there is something that the staff views as being significantly flawed in this review, then I think we should have the right to put it on an agenda and bring it back before you. Any objection to that?

MS. KERNS: David, just for clarification purposes of what we give to the New England Council and when we give it to them. Would you want us to wait to provide any information to the councils Habitat Committee, PDT, or the full council until after you've received the full feedback from industry; at least one month from now if not before then? They have not indicated when their next meeting will be, but I do know that they want to start to incorporate feedback from the commission and these survey results into the documents that they begin to draft.

CHAIRMAN BORDEN: In my own case I wouldn't have any objection to giving them a draft copy of the report now, so they can consider the provisions. I still think we need to go through some kind of comment period here with the industry. That way we get the benefit of both. Now, in terms of – and Terry, please correct this – it is my understanding that the council is not going to have another Habitat Committee meeting for a couple of months; because the staff is dealing with other issues. I think we've got a little bit of time on this.

Okay, so with that as guidance we'll move on to the next issue which is corals; and we're back to Bill Adler. There are two aspects of the coral issue. Actually we had three items on the

agenda that are related to this. I am just going to talk about the first one. I'm not going to be too long with this.

Council has this process, it's going on. Doug Grout and Terry got together and I think decided that it was appropriate for the Lobster Board Chair to serve on the committee, so I've been doing that. We've had one meeting. About two years ago or three years ago the council was well into their coral amendment, and for a whole variety of reasons decided to delay action on it, so they did that.

There is basically a draft document that has been prepared. Now what they've done, and Terry, please correct this if I misspeak. They've decided to prioritize this. One of the priorities that the council identified when they annually set their priorities; and they've started work on it, so there has been one meeting of the committee since I've been on it.

It is one of these cases where they've got to start the whole process over. They're going to look at goals and objectives and basic management frameworks to move forward. Although there is a draft document that document has not been reviewed by the council and there is no formal position on the part of the council; other than a few provisions that had been recommended by the committee.

This is essentially my point in this; this is essentially the start of the process. What I would envision doing in my capacity as Chair, I'll try to represent the interest of the board as well as I can. But I think it is going to be critical to pass some of the documents off to the board and eventually get one of the New England Council staff down here to brief the board in detail.

At the end of the period, we'll have a public hearing document is what we'll have. I think it is incumbent upon the commission to take a position on that and formulate whatever recommendations we want in that. I would also note that the Mid-Atlantic Council went through

a similar process that I was not privy to, but about half the people around the table were part of that.

It has been a widely regarded output. There have been lots of complements. What I would envision that the New England Council is going to follow some of the format that the Mid-Atlantic Council, particularly when it comes time to doing workshops. I think when we get to the point where we hold workshops on this particular issue, I think we need to have representatives that represent our fisheries at those meetings.

I don't have much more to say. There are a number of people, Terry is a member of the committee, and Doug Grout is a member of the committee, Mark Gibson and Eric Reid. There are five of us, basically who are commissioners who are on the New England Council's committee. I can pretty much assure you that I may be the bashful sort, but none of these other individuals are. I'm sure that our interests will be well represented. Any questions on that? No questions.

#### **OFFSHORE MONUMENTS PROPOSAL DISCUSSION AND BOARD RESPONSE**

CHAIRMAN BORDEN: Okay so the other part of this is the monument issue.

I'm just going to provide a very brief introduction. Then I would like Doug to actually talk. This is kind of a parallel effort, and it deals with a lot of the same issues. And actually, maybe it would be better if I just let Doug do the intro on this. Doug, do you want to comment?

MR. GROUT: Sure, Dave. In your supplemental material there are a couple of memos, one from me regarding this issue and one from Chairman Borden. Last fall the Obama Administration announced that it was considering protecting waters off of the coast of New England through the Antiquities Act.

For those of you who are not familiar with this, this is essentially the act that helped establish a lot of national parks. The proposal specifically identified the New England Coral Canyons and Seamounts as a region, as well as originally there was a proposal to protect Cashes Ledge; but there were no details behind it, what kind of restrictions might occur nor were there any details about the boundaries of it.

Then on March 25, the White House Council on Environmental Quality announced that they were removing Cashes Ledge from consideration; at least under this administration, for designation as a national monument. However, those areas southeast of Cape Cod were still going to be considered.

As I said, the Antiquities Act has been used to create national monuments on federal lands, and of course 3 to 200 miles is considered federal waters. It is supposed to be the areas that contain historical landmarks, prehistoric structures, and here is the part that applies to us or at least to the ocean here is; other objects of historic or scientific interest.

I think the main purpose behind considering these is to protect the deep sea corals. It is also supposed to be when they establish it; it is supposed to be the smallest area compatible with the proper care and management of the objects to be protected. Some of the critics of the Antiquities Act highlight that there are no requirements for an environmental review or public participation.

They also mention that they are vague on the size of the requirements or the criteria for establishing the monuments. Those who support it, using the Antiquities Act, state that it is important to expeditiously preserve resources for future generations. Because as we've seen from the survey that we just reviewed of the offshore lobster fishery.

We know there is significant lobster fishing effort going on in the offshore canyons. You saw that

it's worth about \$15 million a year for the combined lobster and Jonah crab landings. I am proposing that at least this board consider whether they want to take a position on this potential national monument proposal.

Now in the other document, I am going to turn it over to our chairman to explain some of the issues here. But if you do decide to take a stand here, we will then bring it to the full commission for consideration on Thursday at the Policy Board. It says in here the Executive Committee; that was only put in because we weren't sure when we were going to meet with the council on environmental quality. It may have occurred before our policy board meeting. We now know it is going to be after; so we will be coming to the full commission if you decide to take a position on this. For more details on this I am going to turn it back over to our chairman of the Lobster Board.

CHAIRMAN BORDEN: A couple of points. As Doug indicated, the Antiquities Act itself does not require public hearings and impact analyses; similar for instance to a Magnuson Act process, which has to go through great details on that. The last agenda item we just went through a report, which kind of details at least for a third of the industry, if not more, the importance of this area in terms of lobster fishing activity.

I would point out that in my memo to the board; every state represented around the table has some fishermen or interest in this issue. The two states with the predominant interest are obviously Massachusetts and Rhode Island, but states in northern New England, New Hampshire has a very pronounced interest in this issue.

The issue of where you would draw a line. I think everybody should think about this in the context that there is no guarantee that a monument is going to be created at all. As Doug identified, there is no proposal. You can't go someplace and pick up a proposal and say, this is what is being proposed.

In a normal regulatory format that all of us have kind of grown up with over the last few decades, we would have a proposal, we would take public comments; we would allow this body to debate the pros and cons of it; and then offer written comments on it. Notwithstanding the fact that that isn't a requirement of the Antiquities Act; we do have an opportunity on May 9, the Office of CEQ has been meeting with individuals who have an interest in this.

They've met with, I think the council representatives, and they've met with some of the states and some of the fishing interest in New England. We have a meeting with them, where we can go talk about the importance of the canyons to the offshore lobster fishery. Clearly we have that linkage with our charge.

But I would also point out that this is not a narrow issue. This issue has the potential to affect the squid fishing that takes place in proximity to the canyons. There is a whiting fishery. There are monk fish fisheries. If you look through, as I put in my memo to the board, there are a number of different fisheries that this commission does not regulate; but will be affected, depending upon where a line is drawn.

I really think we have a vested interest to try to flesh out a position on this. In the context of not testifying in favor or opposed to a monument, but more in the context of providing guidance to CEQ in the context of, if you are going to go forward with this, we recommend you look at certain ways of minimizing the impacts on some of the constituents that we all represent.

What I would like to do is take any comments that people want to offer. The basic question I think to the board is, do you want to try to finalize some kind of preliminary position on this? I use the word preliminary, because if for instance there is no action on this and a proposal comes out; then I think it is incumbent upon both the board and the commission to actually take a formal position based on whatever the written position is at that time. But in the meantime, I



think we need to provide some guidance to office of CEQ on how this would be done to mitigate impacts. The last thing, I just saw Tom Fote's hand go up. Recreational fishermen could be affected by this. This is not just a commercial issue. Tom, on the issue of whether or not you think we should comment; and then Bill Adler.

MR. FOTE: When President Clinton proposed Hawaii to put the first monument there and closed millions of acres of commercial fishing, and recreational. The recreational community in Hawaii said, well it is not affecting us. I was one of the people yelling and screaming that no, you better watch out; this is going to affect you, and you shouldn't be supporting this.

You shouldn't support closing an area like that in the monuments. That is what happens to most of the monument areas, without the science to justify the closure. As you pointed out, there was no science. Came George W. Bush, and he expanded that and then it did affect them and they were already stuck in the battle of basically what to do on those areas.

The California coast, since I am involved in a lot of national issues because of my relationship with other organizations, I've been involved with this up and down both coasts and in Hawaii. It upsets me that we close areas and we put these monuments in without any justification of the science or any consequences; just arbitrarily somebody by executive order puts a position in and we're stuck with it.

I am looking at we should study this and if we decide that we should oppose it, we should oppose it; because I think we get ourselves sucked into saying, well we should just agree with it, they provide this. Then all of a sudden five years later another president can come in and change it altogether. Depending who they listen to, which they listen to other groups that are not involved in the fisheries, it affects both commercial and recreational fishermen.

We basically testified and sent our letters in regarding that; and the same way we're doing against the proposed sanctuary for Sandy Hook Bay in the areas. They just came and decided that. Because a guy from Heritage Foundation decided this was a good move. He has no idea of commercial or recreational fishing, but said it's a great idea.

I said do you know what the consequences are; he said well I don't care. I just thought it was a good idea; and so they're moving forward. We have to be careful. We're here to represent sustainable fisheries; that is what is in the charter, and everything that won't promote that that just arbitrarily shut down areas we should be opposing.

MR. ADLER: I do think we ought to put some type of a letter in or some kind of a response saying that you know you've got to look out for this you've got to look out for that. Then perhaps as Tom had brought up, if there is a proposal we put our position in or our thoughts in. Apparently they may not have listened to us, so then we oppose it.

My question is, if they do a monument, national monument, who puts the rules in on that or is it just yes, this is a monument; no rules, no changes? Does somebody get assigned; I don't know whether it's the National Marine Fisheries Service, to put in restrictions for the thing that was just declared a monument? I don't know. I also wanted to see, what other areas were submitted or are in there that; please have a national monument here. I'm thinking particularly of Stellwagen Bank Sanctuary, where we went around and around with putting restrictions in to that area for a research area to make it beautiful, so all the ships that sank there are all wonderful. I just was curious as to whether Stellwagen had put in something on this monument thing that; hey, consider us. That is one thing. The second thing is, yes we should comment and the third thing is who puts rules in once a national monument is declared?

CHAIRMAN BORDEN: Let me take those. In terms of rules my understanding, if anybody has a different view please offer it, my understanding is that as part of any declaration the Office of the President basically can specify what those rules are. It simply the Antiquities Act is an act, at least in my own view that has been used historically. It was originally adopted in 1906. It has been used to great effect, I think by both Republican administrations and Democratic administrations to create some of the greatest parks in the country.

But that said, in this particular case, we're now whatever it is 110 years past the implementation date of the original act; and times have changed. I mean there is a whole series of presidential executive orders from both democrats and republicans talking about the need to have due process, for instance.

None of that really is required here. The answer to one of your questions, Bill is the president can specify what the rules are, and they can be very restrictive. As Tom Fote pointed out, in some areas of the Hawaiian chain, I believe there are requirements to get a permit to sail through the area, with no commercial fishing and no recreational fishing.

I mean in my own case I view this as a serious issue. I think we should provide all the guidance we can provide to CEQ before they make their determination. It is extraordinarily, if you read through that document we put in the briefing material, there have been cases where the actions of a president have been overturned or modified by Congress, but they have been slim and few between.

I think now is our time to have some input to it. If in fact we get a written position, then I think we should just circulate it. Maybe Doug would put together a small committee to formalize a written recommendation for review by the rest of the commission, or whatever; handle it in a more formal manner than just doing it du jour at this point.

MR. ADLER: Is there a list of one's they're looking at? I know you just said that they turned down Cashes Ledge. Okay, but is there some list out there as to what they are considering?

CHAIRMAN BORDEN: They've got an area primarily focused around oceanographers and all the sea mounds that are under consideration. Originally Cashes Ledge was in the mix. Then you probably saw the press in New England that there had been meetings between CEQ staff and various fishing organizations, and that was off the table.

But I'm also privy to the fact that this decision isn't over until it's over. In other words the President has the right to make a determination at any point, sign a document and it's done. The fact that there was an initial recommendation to take Cashes off the list does not mean that it's off the list until it's over.

MR. ADLER: But is there a list?

CHAIRMAN BORDEN: No. It is pretty generic. There is no proposal. This is one of the biggest problems with this that in my own case I've been trying to deal with this at the association level. There is not a written proposal on this, so it is very difficult for all of us; regardless of our perspective, whether you like this or don't like this, to comment. You can't offer comments on how to mitigate this unless you know what the details are of the proposal. Sarah, do you want to speak?

REPRESENTATIVE PEAKE: I think that you paint an accurate portrayal of what the process or lack of a process is. There may be some restriction on the number of days prior to the end of an administration, after which the President cannot declare either an underwater valley or seamount or something inside of the continental United States a national monument. But it can pretty happen by the stroke of a pen. I agree, I think it behooves us to be as engaged as we can in the

process. Doug, I would be happy to work with you on coming up with a proposal.

This is a very different process, this declaring of a national monument; very different and shortened and almost circumventing a public input process, very different from establishing well like the Stellwagen Bank National Marine Sanctuary, the Gerry Studds Sanctuary. Their fishing interests were highly negotiated by it. I believe it was created by an act of Congress as opposed to just an executive order of the President. I will say I know from my own legislative body that there is a push afoot, and of course the state legislature really has no say in this whatsoever.

We have no jurisdiction over it. However, state legislators along the coast do have a bully pulpit with which to weigh in. There is a concerted effort to get especially legislators that represent coastal communities to weigh in, in favor of the creation of this protection around, first it was the sea mounds and the canyons; now it is primarily just the canyons.

As an organization I think that we can certainly, at a minimum go back to our home states and for the legislative representatives, whether proxies who are here to reach out to our colleagues inside the state legislatures to say; hey, before you just sign on to some sort of group letter encouraging this, come talk to us. Let's see what the proposal is from the ASMFC. Then I think for this group to take a position is also critically important.

CHAIRMAN BORDEN: Just a follow up on that. I note that Beth Casoni and others in the audience have already submitted very detailed letters to the president on this. In Beth's case she was speaking on behalf of 10,000 lobstermen. I've got Pat Keliher. Anybody else; and then I am going to make a suggestion.

MR. KELIHER: I think the points have captured a lot of the process. The state of Maine has been very vocal on this particular issue. Governor

LePage submitted a letter to the President, unanswered but submitted a letter. We participated at the listening session, if you will, in Providence, Rhode Island.

As a side note, Brown University pushed very hard, and I wanted to un-enroll my son from that school immediately based on some of the comments I heard from Brown University, but he wouldn't leave. The one thing that has not been talked about is the fact that the President also has created a National Ocean Council. He has completely gone around one of his own executive orders in doing so. He has been silent on that particular issue. We addressed that with CEQ at a meeting this winter. To your point, your very accurate point, it is not over until it's over. When CEQ told myself and some of my staff that Cashes was off the table, they used their words very carefully. It said, Cashes is off the table – for now, and they were focusing on the canyons and seamounts. I think it would behoove this body as a board and as a commission to take action and lay out a very carefully worded letter expressing our concerns; especially from a process relationship. This is for me very problematic that we could move down this road; create these large closures with zero input from the public and from the industry.

CHAIRMAN BORDEN: All right, let me just suggest this. Is there anyone around the table who disagrees with the comment that we should try to comment on this? There is no disagreement with that. Let me try to expedite this. Eric Reid and others have been working on a proposal, and Eric would like to expose the board to it and see whether or not you are receptive to it. I just introduce it by saying, it is a process suggestion.

What I mean by that. His suggestion is basically to create a line, and if, and this is a big if, if there is going to be a monument then deal with a monument from this line seaward and then allow the New England Council to proceed with their coral management process; which is a very public process with impact analysis and so forth,

to flesh out the details inside. Eric, do you want to offer comments and then put your proposal on the table?

MR. REID: Are you putting up a chart on the board as well, or no? I'll do my rationale first and then I have the motion, you can start reading the motion, if you don't want to listen to me that's fine. Time is not something we have the luxury of, time is of the essence. The Antiquities Act could be used tonight, perhaps, if our President decided to do so. Two acts of Congress that are possibly in play on this issue, and we should prefer that the Magnuson-Stevens Act, the council process be used.

The reasoning for that in my opinion is that it is better informed on the issue, it is more experienced with corals and industry protection alike; and there was some mention of the award winning effort by the Mid-Atlantic in their coral action, which there are some people in this room were involved in that for sure.

Magnuson is much more open and public in its methodology, and it allows for input from all the stakeholders, and it requires NEPA review and guidelines; which the Antiquities Act does not do. There is a very real possibility that the Antiquities Act will be used, and it will trump all the aforementioned processes and the expertise.

With all that in mind, if the President, this President or future Presidents should chose to use the Antiquities Act, then we should be proactive and we should propose and present our stance on the issue of marine monuments in the Atlantic; and particularly the New England region to that office and its advisor, which is CEQ.

This is the chart that we drew, and if you don't like it I drew it, if you do like it, it took a village. Let's leave it at that. But basically, this was developed, first of all this is a publically seen option and it has been shown to CEQ and the President for use and their guidance. We don't

know if there are any other ideas behind closed doors.

But that is all the more reason that this body should use the commission form and the path of the MSA into developing protection for industry and corals alike. The boundary before you is the only effort and option to date, given to the Executive Branch, which has been developed with considerable, and I mean considerable, input from fishermen; including offshore trawlers, lobster and crab fishermen, the red crab industry, bottom longliners, gillnetters, as well as scientific advice from a lot of sources and members of Congress. I would be happy to answer any questions, and if you want me to read the motion into the record I'll do that too.

CHAIRMAN BORDEN: If I understand the essence of the proposal, as I said before it is, have a line. If you're going to consider a monument you do it seaward of this line; and then anything shoal of that would be deferred to the New England Council process.

MR. REID: That would be my opinion. This does not mean that anything is going to go away today. What it means is we would prefer of course that MSA be allowed to run its course and not invoke the Antiquities Act. However, what we're proposing is that if in fact the Antiquities Act be used, it be used outside of the line that is on that chart; and allow the Magnuson-Stevens Act to take care of the much more technical and detailed activity following what the Mid-Atlantic did, the award winning effort in the Mid-Atlantic, to cover the rest. It's a combination and that line is to designate where one should be used and where another one should be used.

CHAIRMAN BORDEN: All right Eric, do you want to make a motion?

MR. REID: I'm ready. **Move that the Board endorse the following concepts and request that the ISFMP Policy Board consider the same. I don't know if we have to change that language from what Doug said or not. The preference of**

**the commission would be for the current New England Council coral management process to continue without Presidential use of the Antiquities Act to protect deep sea corals.**

**Should the President, advised by CEQ, insist upon designating a New England waters deepwater monument prior to the end of his Presidency, the Commission requests that any areas so designated be limited to the smallest area compatible with the proper care and management of the objects to be protected; as required by the Antiquities Act.**

**The area be limited to depths greater than approximately 900 meters and encompass any or all of the region seaward of this line out to the EEZ. That only bottom tending fishing effort be prohibited in the area, and that all other mid water and surface fishing methods, both recreational and commercial be allowed to continue to use the area; and that the public and affected user groups be allowed to review and comment on any specific proposal prior to its implementation.** If I get a second I could talk about it forever.

CHAIRMAN BORDEN: All right, do we have a second on the motion? We've got a couple of hands up; Emerson. Eric, do you want to comment further on the motion?

MR. REID: I could talk about it all day. It is critical that we take a stand and we don't waste any time. It is a scary thing, the Antiquities Act. It has been amended by Congress a few times, but basically it is uncontested. There was an earlier discussion about the income of 18 or 20 lobstermen that's it.

I mean a lobster business out in these areas, at least what we think these areas are, we're not really sure, is \$38 million ex-vessel price, which is well over \$100 million valuated industry. That is one fishery. There is a huge whiting fishery out there, there is butterfish there is squid. There is the red crab industry, who fishes deeper than anybody. That is \$15 million ex-vessel and 150

people working in New Bedford; and that fishery is MSC certified. I know it's late, but I can't stress the importance of taking a position on this anymore.

CHAIRMAN BORDEN: Eric, I just want to make sure that I understand the process here. If this motion were to be adopted, it is a recommendation to the policy board; if the policy board adopts it then the commission would send a letter to CEQ articulating this position. When the leadership of the commission goes and meets with CEQ on this, we'll verbalize whatever the position is. Is that correct?

MR. REID: As far as I understand, Mr. Chairman that is correct. To answer your question, CEQ is the Council on Environmental Quality, which is basically the advisor to the President in these kinds of actions. They have been to New England for at least five, more or less invitation only meetings to discuss this issue.

They have met in the White House with several other user groups. It is a listen only, and a few questions. This effort is to say, hey; we don't want you to use the Antiquities Act, but if you do, we feel that the combination of Antiquities Act seaward of this line, outside of the line and the Magnuson Act inshore of the line, is the best combination for the public.

CHAIRMAN BORDEN: Eric, the other question is, do you have any sense for how much of the corals will be protected by this line?

MR. REID: Of known corals, depending on which status that you look at, it is 60 to 80 percent of known corals outside of that line. When you consider what Magnuson Act will do. I can't really guess at it, but it will be 80 to 90 percent; depending on how Magnuson plays out.

CHAIRMAN BORDEN: Questions on the motion. I've got Toni and then Dennis.

MS. KERNS: I was just going to suggest that the language at the beginning of the motion reflect what the intent is to do and it is that the Lobster Board is requesting that the ISFMP Policy Board sent a letter to CEQ, so that is what you would be asking for; so it is just clear on the record of what we're asking the Policy Board to do. It is to CEQ that you want the letter to be sent to, correct? Who would the letter go to?

MR. REID: You would send it to the President.

MS. KERNS: Okay to draft a letter to the President then.

CHAIRMAN BORDEN: All right, Eric is that agreeable to you and the seconder? If it is then might I suggest you work with Kirby and add that language into it while I take a few comments? Any comments on this? Mark Gibson.

MR. GIBSON: A couple of comments. First I would suggest dropping the words prior to the end of his Presidency. I think that; well it implies that there is some legacy building issues to go on here, and I don't think that really belongs in a letter to the highest Chief Executive. That may be true, but I don't think we should be saying something like that. The second thing, the weaknesses that occurred to me, I don't object to the plan but the designation under a marine monument is protected over all extractive activities. What we're suggesting is that we can take care of the fishing part of it; ASMFC and the Council. That leaves us open to where proponents can marshal the argument that we're worried about more than fishing.

We're worried about mineral extraction, gas and oil, sand mining, whatever else might go on there. That is all out of our reach with the exception of consultations for essential fish habitat actions that might impact that. I just wanted to put that point out there and also suggest that we could be a little more respectful in that set of words there.

REPRESENTATIVE PEAKE: In that vein, I think it would be powerful for the motion to lead with the notion that the public and affected user groups should be allowed to review, you know we ask that they be allowed to review and comment on any specific proposal prior to its implementation.

I think a key element of what's missing here is the lack of public process; and therefore the lack of the ability for what will become a final order to be amended and negotiated, compromised over, and ultimately for the best solution to come out of the process. What we are looking for, even though there is no public process, we're going to send a letter and try to create a public process here. But I think asking not only that we, but the other affected user groups be allowed to review and comment is absolutely essential to what is going on here.

MR. ABBOTT: Just a question about this. I'm assuming that the Antiquities Act doesn't expire with Obama's administration in January. Is that not true?

CHAIRMAN BORDEN: Doug, you are shaking your head.

MR. GROUT: The Antiquities Act has been in place since 1906.

MR. ABBOTT: Again, my point would be then in the paragraph that says, should the President. It almost speaks about the existing President; should it not read should a President?

CHAIRMAN BORDEN: That's another perfection so we can avoid making motions and substitute motions. Eric.

MR. REID: Yes that is fine with me, and Sarah's request to put the last bullet at the top is fine with me as well. The way I wrote it originally was the President, current or future. But that is fine.

CHAIRMAN BORDEN: Does the seconder agree to that; yes.

MR. HASBROUCK: Yes that's fine with me.

CHAIRMAN BORDEN: If the staff could revise that motion accordingly. Other points on the motion, any other points? Yes, Pete Burns. Excuse me, Pete it is getting late.

MR. BURNS: You're doing a good job, Mr. Chairman, thank you. I just wanted to say for the record that NOAA Fisheries certainly appreciates and respects that the board wants to comment on this issue; but we're going to abstain from this, because the proposal comes from the Office of the President.

MR. STOCKWELL: I want to follow Pete in saying the New England Council is a quasi-federal agency and I will be abstaining from voting on this motion as well.

CHAIRMAN BORDEN: Anyone else on this? I'm going to take a few comments from the audience. Greg or anyone else in the audience wants to comment on this motion?

MS. CASONI: Thank you, Mr. Chairman; Beth Casoni. We support this effort by the Commission and we thank you in advance. We've been meeting with Congressional members and bringing this to their attention continually. It is of the utmost importance that this does not happen. I commend you for your efforts going forward, and if there is anything we can do as an organization, we're here to help.

MR. DiDOMENICO: Greg DiDomenico; Garden State Seafood Association. We support this approach completely and appreciate this body weighing in. I can tell you that having gone through this in the Mid-Atlantic, the important part, and I think Eric has characterized it well; that is if you don't do something there will be unintended consequences to this action, if it does in fact go as an antiquities designation that will be irreversible. This is something that several fisheries will just no survive. Thank you very much.

MR. ARNOLD LEO: Yes, Arnold Leo; I represent the fishing industry of the town of East Hampton. I just want to put us on record as supporting this motion before you. I do think one word about the wording of the motion. In the paragraph that says should a President insist upon designating, I think insist is a little over the border. I think if it just says should a President designate a New England deepwater monument would suffice. Thanks.

CHAIRMAN BORDEN: Anyone else in the audience before I go back to the board? Dick Allen. Is there anyone else while Dick is going up there? Okay, no hands up.

MR. DICK ALLEN: I just want to speak on behalf of Little Bay Lobster Company and the Atlantic Red Crab Company that I think this is an excellent approach. I think it really satisfies everybody's interest that is not like you're just opposing it. It gives those who want to protect a huge area what they want, while it is still protecting the ability to do the process right as you go along. We would support this, thanks.

CHAIRMAN BORDEN: Back to the board. Any other perfections of the language? Are you ready for the question?

MR. WHITE: I guess I agree with Arnold on the "insist" is I think a little harsh. How about if we say, should a President decide to designate; as opposed to insist.

CHAIRMAN BORDEN: Okay so Eric and the seconder, you've got another perfection here.

MR. REID: I'm fine.

CHAIRMAN BORDEN: Emerson.

MR. HASBROUCK: Yes, I'm fine with that.

CHAIRMAN BORDEN: Any objections to the perfection; no objections. Ready for the vote? Do you need a caucus? No hands up. All those in favor signify by raising your right hand.

MS. KERNS: I hate to do this to you, Eric; but you've changed it a little bit here and there so I think we should read it into the record. I know that you've changed the language.

CHAIRMAN BORDEN: All right, so Eric would you read it one more time?

MS. KERNS: That is what Joe would tell us. That is what Joe would tell us.

MR. REID: Yes, Joe. Is this language okay, before I read it? I'm not reading it again; we're good. **Move that the American Lobster Board recommend the ISFMP Policy Board send a letter to the President of the United States of America regarding the following: The preference of the Commission would be for the current New England Council coral management process to continue without Presidential use of the Antiquities Act to protect deep sea corals.**

**Should a President, advised by CEQ, decide to designate a New England waters deepwater Monument prior to the end of his Presidency, the Commission requests that any areas so designated, be limited to the smallest area compatible with the proper care and management of the objects to be protected; as required by the Antiquities Act.**

**The area be limited to depths greater than approximately 900 meters and encompass any or all of the region seaward of this line out to the EEZ. That only bottom tending fishing effort be prohibited in the area and that all other mid water/surface fishing methods, recreational and commercial, be allowed to continue to use the area. That the public and affected user groups be allowed to review and comment on any specific proposal prior to its implementation.**

CHAIRMAN BORDEN: All right, are you ready for a vote on this? **If so, all those in favor raise your right hand; 9 in favor, opposed, any opposed,**

**abstentions, 3 abstentions, any null votes? The motion passes.** Any other business on this agenda item?

MR. McKIERNAN: Other business?

#### **OTHER BUSINESS**

CHAIRMAN BORDEN: I'm going to go into other business, but I'm just saying any other business on this agenda item, no? Okay so I think we're to Other Business. Terry had asked for time under Other Business; is that correct?

MR. STOCKWELL: I'm going to defer to John Bullard or Pete or Chip for an update on the SBRM coverage for lobsters in New England.

#### **SBRM COVERAGE FOR LOBSTERS IN NEW ENGLAND**

MR. BURNS: Just a brief update. As most of you probably already know, the standardized bycatch reduction methodology is an omnibus amendment that applies to all of the New England Council's fishery management plans; and the intent of the amendment is to allocate observer coverage in order to get a better idea of bycatch. The sampling design includes all vessels that have a vessel trip report requirement. When this was rolled out last year to the lobster industry, it only captured only those federal lobster vessels that had a vessel trip report requirement. About 40 percent of the federal lobster fishery does not have one of those requirements, so there was a significant amount of sea days that were applied to the lobster fishery, but only to that sector of the industry that had the vessel and trip report requirements. There were some concerns by the industry about this that it didn't necessarily give a representative sample of what was happening in the lobster fishery with respect to bycatch.

We convened a workshop back in October, and we had staff from the Commission, from NOAA Fisheries, from the Northeast Fisheries Science Center and also from the states come together



and talk a little bit about the program; and we came up with a methodology to be able to expand this sampling pool to all federal lobster vessels.

It seemed to be a decent way to go, but it turns out that in order to change the sampling design in the SBRM, there has to be a change to the amendment, and so there is a process that needs to take place in order to do that. Right now NOAA Fisheries is working with the councils, and I believe this issue is going to be raised at the Northeast Regional Coordinating Council very soon; and they will be discussing that.

Just the outcome for this year is that it is going to result in about 18 sea days now for the lobster fishery in New England, so it is a smaller amount of sea days that are going to be applied to just this subset of vessels that have a vessel trip report requirement and a federal lobster permit. Last year it was a significantly higher number of days.

But that was because it was keyed in with the groundfish requirements; and this year I think it hinges off of other fisheries, so the number of sea days in the interim is not expected to be that burdensome on the industry. Hopefully moving forward if something happens and it can be changed at the council, then the new expanded approach for the lobster fleet can be implemented possibly next year.

CHAIRMAN BORDEN: Terry, follow up?

MR. STOCKWELL: Yes, one bit of follow up is the NRCC meets next week in Portland, Maine.

CHAIRMAN BORDEN: All right any other questions on this issue? Any of the board members have – Toni.

MS. KERNS: Peter, then no sea days were allocated south of New England?

MR. BURNS: I'm not sure of that. But I do know that it was 18 days in the New England region.

MS. KERNS: Do you think they could let us know at the NRCC if there is any sea days allocated to south of New England for the offshore area?

MR. BURNS: We can certainly get that information for you, Toni.

CHAIRMAN BORDEN: Any other questions? Any other business to come before the Board, Dan.

MR. McKIERNAN: David, this has to do with an issue that already passed earlier today and has to do with the incidental bycatch that Steve Train raised; and he said we need a definition on incidental bycatch. My question to you is how can we get this defined in this Jonah Crab Plan going forward?

To me, incidental bycatch should be catch that doesn't exceed all the other catch that is on the boat, taken by the gear that the crabs were taken. I think we're fairly comfortable that a dragger taking Jonah crabs isn't dragging likely for Jonah crabs; it is a secondary species. But because we went with such a high limit, we need to define incidental bycatch; otherwise it is a thousand crab directed fishery. When can we get that accomplished? Can I get that onto this addendum that is going forward on claws?

CHAIRMAN BORDEN: I defer to the board, but have you got a specific proposal you want to put on the table?

MR. McKIERNAN: Yes, I would suggest that incidental bycatch is an amount of crabs that does not exceed the weight of all other species aboard, caught during the trip by the same gear that caught the Jonah crabs. You wouldn't want to get on a boat and find 1,500 pounds of herring and 1,000 Jonah crabs and call it bycatch. That is different gear. I see Officer Cornish is nodding his head.

CHAIRMAN BORDEN: Okay, so let me just ask the board, what is your preference on how to handle this? Dan is making a specific proposal.

We can deal with it now; we can delay the addendum and deal with it at the next meeting. Let's see, this doesn't have to go before the Policy Board, so this is the only opportunity; correct, Doug? In other words, if we don't take action on it, either now or at some point in the future, it is not like there is the policy board. You could raise this at the Policy Board?

MR. GROUT: I'm not sure. I honestly, in one sense it sounded like you were trying to, this is an issue for the addendum that we just passed. That would require a new addendum. Now, were you talking about trying to attach it as another item onto the claw, any kind of claw addendum that we develop?

MR. MCKIERNAN: I'm looking for options, because I think this is a serious hole in the plan that we've just approved. It didn't come to my attention, because I never dreamed it would be a 1,000 limit. When it was low as 200 there was no issue, but when you get to 1,000 for trap gear, then all of a sudden it has to be defined.

Steve Train pointed it out, Mike Luisi started asking questions about, well what is the eligibility for someone to take part in the Jonah trap fishery, and so clearly there is a loop hole here. I'm asking when we can do it. Maybe we do it at the next meeting. I just want to bring that up now.

CHAIRMAN BORDEN: Maybe we can get help from staff, but the way I would see it is you've got to start a new addendum, because we just approved that addendum. That is going to require development of measures. I think you should bring it up, have it as an agenda item on the next meeting.

MS. WARE: In talking with Toni, I think we have two options. We could include it in the claw addendum that was just initiated if the board can come to a quick consensus on what they want. Something that has also been talked about is the possibility of a third addendum being initiated in August, to deal with another loop hole; and it

could be included at that time and discussed in August. I think it is really up to the board.

CHAIRMAN BORDEN: What is the preference of the board on this? Does anyone have a preference? Mike, and then Terry.

MR. LUISI: I appreciate the need to define this incidental bycatch. I just don't think it fits in the claw amendment or the Claw Addendum. Maybe if we're going to have a loophole addendum, and that is what we're calling it; we can close a few loop holes. Personally I would prefer to do it that way and discuss it in August.

MR. STOCKWELL: Mike covered my thoughts. I do agree with Dan, I would second his motion when it comes up.

#### **ADJOURNMENT**

CHAIRMAN BORDEN: Any objection to doing that; any other business to come before the board? I know you have all had a wonderful time today. Okay without objection the meeting is adjourned.

(Whereupon the meeting was adjourned at 3:54 o'clock p.m. on May 2, 2016)