

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

**The Marriott Norfolk Waterside
Norfolk, Virginia
October 16, 2017**

Approved February 6, 2018

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INDEX OF MOTIONS

1. **Approval of Agenda by Consent** (Page 1).
2. **Move to add sub option under issue 1, option c, to allow commercial harvesters with less than a 1,000 pounds of lobster landings in the previous year to report monthly summarized data instead of trip level data** (Page 19). Motion by Doug Grout; second by Pat Keliher. Motion carried (Page 20).
3. **Move to approve Lobster Draft Addendum XXVI/Jonah Crab Draft Addendum III for public comment as amended today** (Page 20). Motion by Pat Keliher; second by Dennis Abbott. Motion carried (Page 21).
4. **Tabled Motion from August 2017:**
Move to (1), allow LCMA 4 fishermen the ability to continue fishing fixed lobster gear for other legal species, such as Jonah crab, during the closed period and (2), exempt closed seasons from the most restrictive rule; as currently defined by the feds.

Motion to Substitute

Move to substitute to: (1) LCMA 4 states (New Jersey and New York) will work with representatives from NOAA Fisheries to develop conservation equivalent alternatives for the current LCMA 4 season closure. We request that the Technical Committee review the alternative management measures to assure that the conservation goals of Addendum XVII are met; and (2) The LCMA 4 seasonal closure relates only to LCMA 4. Permit holders with an LCMA 4 designation in another Lobster Management Area designation on their lobster permits would not have to similarly remove their lobster gear from the other designated management areas during the LCMA 4 closed season. This also applies to seasonal closures in other LCMAs (Page 21). Motion by Jim Gilmore; second by Tom Baum. Motion carried (Page 22).

Main Motion as Substituted:

1 – LCMA 4 States (New Jersey and New York) will work with representatives from NOAA Fisheries to develop conservation equivalent alternatives for the current LCMA 4 season closure. We request that the Technical Committee review the alternative management measures to assure that the conservation goals of Addendum XVII are met.

2 - The LCMA 4 seasonal closure relates only to LCMA 4. Permit holders with an LCMA 4 designation and another Lobster Management Area designation on their lobster permit would not have to similarly remove their lobster gear from the other designated management areas during the LCMA 4 closed season. This also applies to seasonal closures in other LCMAs.

5. **Move to approve the 2017 Lobster FMP Review, state compliance reports, and *de minimis* status for DE, MD, and VA** (Page 24). Motion by Doug Grout; second by Roy Miller. Motion carried (Page 24).
6. **Move to approve the 2017 Jonah Crab FMP Review, state compliance reports, and *de minimis* status for CT, DE, MD, and VA.** (Page 25). Motion by Mark Alexander; second by Jim Gilmore. Motion carried (Page 25).
7. **Motion to adjourn by Consent** (Page 27).

ATTENDANCE

Board Members

Pat Keliher, ME (AA)	Emerson Hasbrouck, NY (GA)
Sen. Brian Langley, ME (LA)	Sen. Phil Boyle, NY (LA)
Douglas Grout, NH (AA)	Adam Nowalsky, NJ, proxy for Asm. Andrzejczak (LA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Tom Baum, NJ, proxy for L. Herrigty (AA)
G. Ritchie White, NH (GA)	Tom Fote, NJ (GA)
Raymond Kane, MA (GA)	Roy Miller, DE (GA)
Dan McKiernan, MA, proxy for D. Pierce (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
Rep. Sarah Peake, MA (LA)	John Clark, DE, proxy for D. Saveikis (AA)
Jay McNamee, RI, proxy for J. Coit (AA)	Ed O'Brien, MD, proxy for Del. Stein (LA)
David Borden, RI (GA)	Rachel Dean, MD (GA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	Mike Luisi, MD, proxy for D. Blazer (AA)
Sen. Craig Miner, CT (LA)	Joe Cimino, VA, proxy for J. Bull (AA)
Lance Stewart, CT (GA)	Peter Burns, NMFS
Mark Alexander, CT (AA)	
Jim Gilmore, NY (AA)	

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

Ex-Officio Members

Rene Cloutier, Law Enforcement Representative	Kathleen Reardon, Technical Committee Chair
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Staff

Robert Beal	Max Appelman
Toni Kerns	Megan Ware

Guests

Terry Stockwell, NEFMC

The American Lobster Management Board of the Atlantic States Marine Fisheries Commission convened in the Hampton Roads Ballroom V of the Marriott Waterside Hotel, Norfolk, Virginia, October 16, 2017, and was called to order at 10:20 o'clock a.m. by Chairman David V. Borden.

CALL TO ORDER

CHAIRMAN DAVID V. BORDEN: Welcome to the Lobster Board meeting, my name is David Borden; I'm the Chairman of the Board, at least for a short period of time.

APPROVAL OF AGENDA

CHAIRMAN BORDEN: We've distributed the agenda. I have a couple of changes to the agenda that have already been suggested. Pat Keliher requested some time under Other Business.

I would like to add an agenda item. I'm also going to comment on Other Business. But I would like to, unless I hear objections, add an item; which is to discuss the potential litigation involving NOAA, in regards to whales, add that after Public Comment. The reason I'm suggesting that we take that after Public Comment.

Some of the discussions on that may have a bearing on what we do on other agenda items; so I think it's important to just get a briefing on it. There won't be any action; it will just be a briefing. I'm going to ask Chip and John Bullard to come to the table please; if you would, to discuss that.

Do I have any other additions or deletions to the agenda as I just described? If not, we'll take that in that order.

PUBLIC COMMENT

CHAIRMAN BORDEN: Did anyone sign up for Public Comment? Nobody signed up. Is there anyone in the audience that would like to comment on items that are not on the agenda? No hands up.

BRIEFING ON POTENTIAL NOAA LAW SUIT

CHAIRMAN BORDEN: Okay, so we're going to take the first item, which Chip, would you please characterize notice of litigation involving whales if you would, generally characterize it. I realize that the Agency hasn't really started to take action on it, so just to provide insight to the Board on how this might be handled by the Agency, and then I think John can follow you up with more specifics.

MR. CHIP LYNCH: Hey everybody, Chip Lynch; NOAA Office of General Counsel, and I'm out of the Northeast. We are in receipt of the letter David just mentioned. I am having trouble getting into the internet; so I don't have it right in front of me, but I think it is October 2, or something to that affect. We received a letter that informed us of a Notice of an Intention to Sue.

The letter is something that we are still digesting. We are reviewing it. I can tell you that the subject matter of the letter, Recent Right Whale Entanglements and Deaths, are things that we were already aware of. We were working on notwithstanding the letter. It is in a Notice of an Intention to Sue, it doesn't necessarily follow that there will be litigation after it. But it is going through the internal process as we speak.

CHAIRMAN BORDEN: Questions for Chip on the legal process? No hands up. John, do you want to talk a little bit about some of the policy issues?

MR. JOHN BULLARD: Sure, thank you, Mr. Chair. This has not been a good summer for North Atlantic Right Whales. As best we can tell, the current population stands at about 458. This summer we lost about 15; 12 of those were in Canada in the Gulf of St. Lawrence, 3 in the U.S. That is about 3 percent of the population. By anyone's definition that would be a crisis. We declared a UME in the U.S. that is an unusual mortality event. We have reached out to Canada; and have a joint effort going on with

Canada to both increase our understanding of causes and also what actions can be taken. Necropsies have been undertaken of most, I think about seven of the whales recovered in the Gulf of St. Lawrence, most of the deaths blunt trauma associated with ship strikes, some entangled by snow crab gear.

The Canadians have acted very quickly to establish speed restriction zones. They've enforced penalties on vessels exceeding the limits in those zones; including one of their Coast Guard vessels. They've also very quickly by our standards, imposed restrictions closing snow crab seasons. They are very aware that they don't have much time before their spring season.

We have made a couple of messages very clear to the Canadians. One is that this is a crisis. Second that we think it's best that we approach this jointly. We've explained that the way we have operated, we think successfully in the United States, is through the Take Reduction Team Process, where we work with industry and learn what science has to tell us; and then negotiate with industry what should be done.

I've explained to the Canadians that if two things happen, industry will step forward and make significant steps. The significant steps have been the removal of 30,000 linear miles of line from the paths of whales; and an increase from about 5,000 square miles to 25,000 square miles of protected areas. Those are significant achievements negotiated through the Take Reduction Team Process.

The two conditions that I've mentioned to the Canadians that need to be fulfilled are first a scientifically proven causal relationship between mortality of whales and behavior by industry; whether it's shipping industry or fishing industry. The second is a fair contribution by the industry. I've said that that fair contribution needs to be determined whether it's fair in comparison of lobster industry versus shipping industry, or fair the U.S. industry versus Canadian industry. But

if you can determine both of those things; that is a causal relationship and a fair contribution, it's my belief that industry will step up to the plate.

The forum in the United States is the Take Reduction Team. The Canadians realize that up until now there have been very few restrictions on Canadian industry; so that it would be very hard to go to the U.S. industry and ask for further, let's say contributions. But that is understandable, because it's only recently that the whales have moved north in search of food.

I think Mr. Chair that one thing I would say is this is a crisis. The steps that the industry is taking to date that I've just summarized if the world were fair, would have continued to lead to the slow population growth that we experienced over the last ten years, up until about three or four years ago. But over the last three, four, five years this population has unfortunately been in decline; and then we've had this disaster this past summer. I think, and I'll wrap it up; that Canada recognizes there is a crisis on its hand.

Canada is in the process of taking quick and commensurate actions. I think that more is going to be required of us as well; and that what form that will take I'm not sure. Whether it's removal of more vertical lines, or whether it will take the form of looking at the strength of the lines that are already in the water.

But I think the best way that worked for us is through the TRT process; relying on the wisdom of the industry. As this is the Lobster Board, I'm talking about the lobster industry. But I don't want to leave shipping out either. Unless there are questions, thank you, Mr. Chair.

CHAIRMAN BORDEN: Questions for John; anyone. Pat.

MR. PATRICK C. KELIHER: Thank you, John. Can you just remind me? Has Canada reengaged with the disentanglement team? They obviously had a tragedy there with the loss of a fisherman trying to disentangle a whale. I know

they suspended activities, as we did, for a time. But did they restart those activities?

MR. BULLARD: Yes. Joe Howlett was tragically lost successfully disentangling a whale in July; to my knowledge. They have restarted the disentanglement of all whales; except right whales. I don't believe they have restarted the right whale disentanglement.

I would also say that Minister Dominic LeBlanc, who is the Canadian Minister of Fisheries, is meeting with industry in Moncton, New Brunswick, November, 9, to engage with both their shipping industry and their fishing industry. I've spoken to him; and I know he takes a personal interest in this that is very strong. He is very aware of the need for quick action. I think they will be engaging with both the shipping and fishing industries very quickly.

CHAIRMAN BORDEN: Anyone else? No hands up, okay thank you very much, Gentlemen. We'll get back on the agenda.

SOUTHERN NEW ENGLAND LOBSTER WORKING GROUP

CHAIRMAN BORDEN: We're going to deal with the Southern New England Lobster Working Group recommendations or report in the document. As you recall at the last meeting the Board approved the measures; but in the final action did not approve the addendum. The Board basically formed a subcommittee, and you've got a whole series of recommendations, and we'll go through that in a systematic way. I would like Megan to introduce the issue, please.

REPORT ON FUTURE MANAGEMENT OF THE STOCK

MS. MEGAN WARE: As was mentioned at the August Board meeting, the Board did not approve Addendum XXV for management use; and instead the Board created a workgroup to discuss future management of the stock, particularly in light of climate change. That

Work Group met via conference call on September 15. Members included Commissioners, TC members, federal representatives, and industry members.

Together the Work Group has recommended five things for Board consideration today; and I'll be going through those five recommendations. The first is to not reconsider Draft Addendum XXV. Based on the August Board meeting it is clear that there are disparate views on the Board regarding this Addendum. This was shown not only through the extensive voting, but also the comments that asked about the efficacy of the LCMT proposals and the need for action. We had some Commissioners who felt the addendum did not go far enough; while others thought the action was not needed. Given a two-thirds majority vote from the prevailing side is needed to reconsider the addendum, the Work Group did not feel that this was a viable option for the Board.

The second recommendation is to review the goals and objectives by which we manage the southern New England stock. There has been concern expressed that that southern New England stock may not be able to be rebuilt to historic levels. As a result the goals and objectives may no longer be applicable.

The Work Group is recommending that the Board task a subgroup to review these goals and objectives; and then report back to the Board at a future meeting. The third recommendation is to engage with the Commission's Climate Change Working Group. That workgroup is developing recommendations on ways to manage stocks that are either negatively or positively being impacted by warming waters.

The Work Group felt that this might be a good resource for the Board; particularly if there is potential to consider southern New England lobster as a case study. The fourth recommendation is to develop terms of reference for the 2020 stock assessment that

specifically consider reference points and environmental drivers.

That new stock assessment does provide an opportunity for the Board to consider new reference points; and in developing terms of reference that tasks the TC to review these issues in the stock assessment process, and may help inform future management of the stock. Then the fifth recommendation is to reduce latent effort in Areas 4, 5, and 6.

Under Addendum XVIII, Areas 2 and 3 are going through a series of trap reductions to scale the size of the fishery to the size of the resource. Similar action was not taken in Areas 4, 5, and 6, resulting in a large amount of latent effort. Some states have over 60 percent latent effort. Reactivation of this latent effort would certainly negatively impact the stock.

The Work Group is recommending that the Board task LCMTs 4, 5, and 6 with developing strategies to reduce latent effort; and then those proposals would be presented to the Board at a future meeting. This strategy not only continues progress on this issue, but it also allows the Plan Development Team an opportunity to work on Addenda XXVI and XXVII, before another management document is initiated.

As a final note, I will say that the Work Group's discussion did focus on Board priorities. As I mentioned, the Board has initiated two other addenda; one to address harvester reporting, and we'll be talking about that later today, and then also an addendum to address resiliency in the Gulf of Maine stock.

Given there is a fixed amount of time for the Plan Development Team and the TC, it is important for the Board to prioritize these tasks. The Work Group felt that both ongoing addenda are extremely important to the Board; and noted that the southern New England stock comprises a very small portion of coastwide landings.

CHAIRMAN BORDEN: All right questions for Megan? Are there any questions on the report? Okay seeing no hands up, let me just offer a couple of suggestions here on process. I think the easiest issues for the Board to deal with in this order are Issue 2, 3, and 4. I think they are pretty straightforward, and then take up 1 and 5. The only reason I'm suggesting that I think the decisions flow better. Do I have any objections to taking those up in that order? No objections.

On Issue Number 2, review the goals and objectives. This comment was made by a number of individuals, and this came up at quite a few of the prior Board deliberations that there may be a disconnect between the current goals and objectives, and those that have been adopted. I just remind everybody that not only do we have kind of overarching goals and objectives; but a lot of times when we do an addendum we have goals and objectives that are specific to the addendum.

If we were to agree with this concept, then my view would be between now and the next meeting we would review all of the goals and objectives that are contained in the lobster document; and formalize a recommendation for Board consideration, which would basically be an action item at the winter meeting.

Now if it requires a revision to a document we could piggyback that on some subsequent addendum; so it wouldn't require an immediate increase in the workload of the staff. I would also repeat, because this is kind of an overarching comment, that the workload, since we've already committed to two what I view as high priority addendums, Addendum XXVI and XXVII. This simply, between the PDT, the Technical people and the staff, we don't have the resources to do three addendums in the coming year.

To me it makes sense to kind of take a step back. I think this was one of the recommendations that our Commission Chairman made. Take a step back, look at the

goals and objectives, and reformulate those and then bring them back to the Board. Does anyone object to that; would be the first question I would ask? If there are no hands up then what I would say is we'll figure out a process and a subcommittee to work on that. John, please.

MR. JOHN CLARK: Just quickly. I mean we just rejected an addenda; its goal was only to increase egg production by 5 percent. If we can't do that I mean is this just going to be going through an exercise to come up with more goals and objectives that this Board will have difficulty passing? I mean it seems that if we can't even increase egg production by 5 percent, there is not a lot we can agree to do, other than what we've already got here.

CHAIRMAN BORDEN: That's a point. But I just reiterate what I said before. I think the merit in this strategy of looking at everything in kind of a holistic way. This is something that the Commission Chairman has engaged all of us with; that we really need to take a step back.

Northern shrimp, southern New England lobsters, there are a whole number of stocks that we really have to come up with a different model on how we're going to manage these things; instead of just being in this kind of driven process, where we're just defining near term goals and objectives. I can see you shaking your head. This is a broader review is what it is. Let me ask the question again. Does anybody object to doing this or want to comment? Dan, you had your hand up.

MR. DANIEL McKIERNAN: I just wanted to make an observation that when you talk about the holistic management. In some ways we need to play a little bit of catch up, because what has happened in the last five to ten years in southern New England is there has been a shift towards Jonah crabs.

The Jonah Crab Management Plan states that the directed fishery shall be executed or prosecuted by the lobster fleet. It's really time

to sort of recognize that this is a fishery that is shifting onto those two species; and to come up with ways that we can tease out some of the data going forward.

But we need to recognize that. For reasons that I don't think were appropriate, we tend to treat these two species separately; yet if you're a fishermen fishing out of New Bedford, or some of the Rhode Island ports bringing in lobsters, chances are you're bringing in more income from Jonah crabs. It's time in these exercises to actually bring those together.

CHAIRMAN BORDEN: Let me ask the question again. Does anyone object to this task? If not, then I'll work with the staff. We'll pick out a small subcommittee to work on it. If you want to volunteer for that we love volunteers. You won't be shot if you step forward. There are a couple of hands up. But we'll work on that. We'll have subcommittee meetings, and we'll bring you a written recommendation. Ritchie.

MR. G. RITCHIE WHITE: My hand was not a volunteer.

CHAIRMAN BORDEN: No, I didn't think it was your hand. I thought it was Dennis's hand that went up.

MR. WHITE: I think it would be important in the subgroup to have Technical Committee representation. I think that there is going to be a need of an evolution within technical committees listening to what we just listened to. I saw in the Northern Shrimp Technical Committee, reluctance to move away from the maintaining recovery and rebuilding.

I can see that it's hard for a technical committee to not have that as a goal. I think that the Technical Committee as well as the rest of us, I mean this is all new and we're coming into this. I think that they are a part of any of these discussions on any of these species I think is very important.

CHAIRMAN BORDEN: Anyone else to this point? Okay so we'll handle it in that manner; and what we'll do is we'll solicit. If somebody wants to participate in it we'll get, I like Ritchie's suggestion. We did that I would point out with the Georges Bank/Gulf of Maine Subcommittee. We did a combination of technical people.

It's really interesting to see the dynamics of putting some of the technical people right next to their bosses, and watching them disagree. We'll do that. We'll handle Number 2 in that manner, and we'll put this into a memo so everybody understands the exact process. Okay, Number 3 I think is fairly direct.

The Chair created this Climate Change Working Group. The group has been meeting, formalizing recommendations. We're all going to be briefed on those sorts of discussions as they go along. I'm not sure that we need any further action on it; other than to keep ourselves integrated into that process. Doug, do you want to speak to that?

MR. DOUGLAS E. GROUT: Yes, we have a document that we're going to give you an overview of at the Policy Board meeting; where we have a variety of recommendations, sort of a list of options that boards could use to adapt management, and also the science to changes in the resource due to environmental changes.

The intent is to give you sort of an overview of it, give you a chance to think about it, and then at the February Commission meeting, hopefully the Commission will adopt that as a policy guidance that they can give to the boards to use, if they find their species being impacted by changing environmental conditions.

CHAIRMAN BORDEN: All right, any questions for Doug on his statement? This is ongoing and we'll have further discussion on it at the winter meeting; anything else on that issue? The next item is this issue of the terms of reference for the stock assessment. This is something we routinely do. There is nothing new here.

I spoke to Bob and Toni before the meeting. Basically, what they would propose on this is the staff will develop terms of reference for us to consider; and then circulate those to a broad group of the Board, and ask for comments. Everyone will be solicited, and then they will consolidate those comments and give us a presentation at the winter meeting.

Are there any objections to that? Okay, now we get on to the more difficult issues. Number one is the issue of not reconsidering. Since I chaired the subcommittee, I would just comment and this is repetitive, but one of the major issues that the subcommittee tried to grasp is the workload issue. If you look at what was contained in Addendum XXV, and where we end up.

In other words, if you compare full adoption of Addendum XXV, according to the measures that we approved, and not taking action on Addendum XXV. There are differences, but they're not significant differences. This was pointed out by a couple of Board members at the last meeting. John just offered a comment on the 5 percent.

In terms of Area 3, the proposal was basically to cut traps by continue the cut in traps. I would note, going back to the whale discussion that that has to be kind of a critical issue in our whale deliberations. If you cut traps, you're going to cut vertical lines. Last year, if you look at the compliance report, with the combined efforts of NOAA and the Commission, the Board, we've eliminated 15,000 traps in Area 2 and 3.

That is a significant decline. That area, I would point out, contributes about 70 percent of the landings to the southern New England stock. In the area that most of the landings are coming from, there is this ongoing program that if you look at Area 3 from the start of the trap cuts until now, we'll end up with more than a 50 percent cut in traps in Area 2 that will be a 50 percent cut in traps.

The one downside of not taking action on Addendum XXV, related to Areas 4, 5, and 6. But they are really minor, and I don't mean this is a disparaging manner. They're really minor players, in terms of the stock. I would also emphasize that southern New England, if you look at just the lobster stock and what we manage collectively, the southern New England lobster stock right now contributes 2 percent, 2 to the landings that we manage. We all have to put that in context of workload and other things. Let me ask the question. Although I invested a lot and Megan invested a lot of personal time in getting that addendum to the state that it got.

I think it's a rational decision to just move away from it, and focus on Addendum XXVI and XXVII, which I view as higher priorities. But I am going to defer to the Board. If anybody disagrees, and they think we should reconsider that addendum, now is the time to speak. Is there anybody at the table that thinks we should reconsider the addendum? No hands up; anyone in the audience? No hands up.

Is there any further action that's required here? The addendum, we're just going to move away from it. Last item, part of the charge, and Megan spoke to this. Part of the charge going back to addendum XVIII was for Areas 4, 5, and 6 to eventually deal with the issue of latent effort and excess effort now. It was kind of in the context of right sizing the industry for the reduced size of the resource.

I think that was the language that we used in the addendum. The last time we discussed Addendum XXV, we heard a couple of suggestions. One I think was from a representative of Connecticut delegation, and another I think from the New York delegation that there was still a continuing need to reevaluate this, and possibly formalize some strategies for dealing with the issue.

My suggestion on how to deal with that is rather than do this from the top down, what I would propose is that we basically engage as

the Working Group recommends, engage the LCMTs in those states to meet with their participants; and have them give us recommendations on how that should be done.

It's a charge that we have deferred action on for some time; it's probably overdue, and then report at the next meeting on what they think are appropriate strategies. If they do that then the Board would be in a position to decide whether or not they wanted to pursue some of those in a subsequent addendum.

But there wouldn't be any immediate action. This would be nothing more than a review by those states. Do you have a problem? Look at your latent problem. Talk to your industry, and come back to us with a range of alternatives that the Board could consider. Are there comments to that; any objections? Pete Burns.

MR. PETER BURNS: I think this is a good approach to allow 4, 5, and 6 to take a look at their latent effort and see what can be done to maybe tailor that down a little bit. We know that Area 2 and Area 3 have done a lot with trap reductions over the years; and they're still going through their scheduled trap reductions.

We at NOAA Fisheries are looking at the Addenda XXI and XXII trap cap reductions and things that could potentially help with reducing effort in the offshore fishery. But I was wondering if it might be worthwhile to really add Area 2 and Area 3 to this list. Even though we know that they've done some things already to reduce traps. If we're going to do a wholesale inventory of how many traps are out there and what the fishery should look like, it might be worthwhile. Even if this is just going to be a review to see what potential options might be available, whether it would be worthwhile to add Area 2 and 3 to the discussion. I think that might be a good way forward.

CHAIRMAN BORDEN: Comments on that any objections to that? No objections. I would also point out. If there are no objections to doing

this, then it's basically a task for the states to work on with their LCMTs. I would also just point out, given the discussion we started out with today, by Chip and John on whales.

It might be a good idea for some of the other areas to engage with their LCMTs, and talk about ideas and strategies that could be used to reduce effort and reduce vertical lines in some of the other areas. I know some areas, for instance, and I'll use Massachusetts as the example, have basically banned vertical lines when the whales are there.

Some of the states have taken kind of extreme actions on this; but there may be other strategies that we could consider to accelerate that dialogue that will eventually end up with the TRT. Are there any comments on broadening this review? Does anyone think that's an inappropriate or an appropriate strategy? Doug, do you want to speak to this?

MR. GROUT: No, I would agree that I think we should broaden it, to try and get out ahead on this.

CHAIRMAN BORDEN: Okay, any objections to doing that? If not then all the areas have the same task then. We'll see where this goes when we get the reports by the areas. From my perspective the industry has been fairly creative, and willing to come up with useful strategies. I think it's a good opportunity for us to listen to them again. Is there any further business on southern New England?

LOBSTER DRAFT ADDENDUM XXVI/JONAH CRAB III FOR PUBLIC COMMENT

CHAIRMAN BORDEN: The next issue is the data collection addendum, which is XXVI. This has been something that has been sorely needed. The technical people, the PDT members have pointed out to us repeatedly that there are deficiencies in the data collection program; and the Technical Committee has done, in my view, an excellent job of pointing those deficiencies out. The first thing I think we're going to hear here is a report by Megan, Kathleen first, and

then we'll get into a discussion of the addendum. Kathleen.

TECHNICAL COMMITTEE REPORT ON HARVESTER REPORTING AND BIOLOGICAL SAMPLING

MS. KATHLEEN REARDON: For Addendum XXVI, the TC was given two tasks. The first task was to evaluate harvester reporting. As part of this task we were asked to assess if the current minimum 10 percent harvester reporting level is statistically valid. We looked at the benefits and potential improvement of precision, with higher percentage of reporting.

Then we make recommendations that could improve harvester reporting. For the second task we looked at fishery dependent bio sample collection efforts. We were asked to identify gaps in the current monitoring programs, and make recommendations to improve fishery dependent bio sampling.

Back in 2007, Addendum X determined the reporting requirements for the lobster fishery. Since 2008, all states collect 100 percent trip level data from dealers. For harvester reporting all states except Maine, require 100 percent reporting, while Maine has 10 percent coverage. In Maine the 10 percent random selection is stratified by lobster zone and license class, so it is not just a straight 10 percent of all licenses. License class is based on crew number and age; and tends to be a proxy for the size of business. The reports are submitted in paper form. The question of the 10 percent harvester reporting in Maine is important; because this fleet makes up the bulk of the U.S. lobster fishery, yet has the lowest percentage of reporting.

Maine harvests 80 percent of the total U.S. landings; with almost 6,000 commercial licenses, and more than 265,000 trips a year. Each year the Harvester Logbook Program selects 650 to 700 licenses to report; and the program enters about 30,000 records. There are a high proportion of licenses without landings, or latency in some license classes.

Back in 2007, to determine a minimum harvester reporting level, the TC used the available Connecticut 1997 logbook dataset as a proxy; because it provided 100 percent of the data on the state's fishery with reported landings and trap hauls. Connecticut had a much smaller fishery, with a couple hundred permits; while Maine's fishery was a couple thousand licenses.

The previous analyses bootstrap that Connecticut data at 2 percent increments to assess the coefficient of variance or CV, at different sampling levels to provide the curve shown. A CV is a measure of variability from the mean, and can be used to determine the precision of results. A lower CV means less variation and greater statistical confidence.

Using the Connecticut data, the TC recommended sampling at 30 percent in 2007 to achieve an estimated 20 percent CV; but the Board ultimately required a minimum 10 percent reporting level in Addendum X that could achieve an estimated 30 percent CV, with expectation that sometime in the future 100 percent reporting would be required.

Now, ten years later, we have available state data with 100 percent coverage. It provides a useful check on the previous analysis and our current results. This figure shows the CVs for total annual landings by license at increasing levels of sampling from 2 to 50 percent for three states. The original 1997 Connecticut data in black, Massachusetts Area 1, 2015 data in blue, and Maine's 2015 data from the 100 percent dealer reporting dataset in red.

This is a useful figure to show how the difference in sample size can impact the CVs, where Connecticut has the highest CV with just over 400 license holders, and Maine has the lowest CV with nearly 6,000 license holders. Massachusetts falls in between. To assess the validity of Maine's 10 percent harvester logbook coverage, the TC looked at multiple effort metrics, including total annual trips, trap

hauls, total soak nights, max traps, total annual landings, and average traps per day.

We calculated the CVs for all of these metrics across years from the 10 percent reporting in Maine; and found that the CVs tended to be low and stable across all six variables. The TC was surprised by how low these values were, with only 10 percent reporting. CV for landings was highest being just below 5 percent, with trap hauls and soak nights averaging around or under 4 percent.

The number of trips averaged around 3 percent. CVs for average number of traps and max number of traps were both below 3 percent, and declined across the time series. These low values provide evidence of precision in the dataset. When the metrics were calculated for each license type, the CVs were higher. But the three license classes that dominated the fishery, LC-1, LC-2, and LC-3, had the CVs at 10 percent or lower. The license types with higher CVs had fewer permit holders for a higher variability in fishing status. Overall this analysis suggests that 10 percent harvester reporting is producing a sufficiently precise representation of the Maine fishery.

To put these numbers into context of other states, we can look at the CVs calculated at different sampling levels for trap hauls, from Massachusetts in Area 1, in 2015 and Connecticut in 1997. The CV at 10 percent in Maine is less than both states at even 50 percent. This again is due to the large sample size and the scale of the Maine fishery.

Maine's 10 percent includes more licenses than most other state's active licenses. We further examined the accuracy and precision of the current harvester reporting, by comparing estimates of total landing, scaled up from harvester data to dealer landings. This assumes that the dealer data represents the true value in the population.

Using the harvester data, we calculated the total landings and 95 percent confidence

intervals for each year, and plotted them against the total landings by years reported in the dealer data. Again, to the TCs surprise, the two datasets compare admirably well; most mean harvester-based landings estimates being at slightly at or slightly below the total dealer landings.

Harvester confidence intervals were about 10 percent of the mean estimate. Only in 2009 did that estimate for harvester landings not fall on the line with the confidence intervals. Also the other thing that was noted was that the harvester landings were able to track the increase from 2008 to 2015.

Next the TC evaluated potential benefits of increasing the percentage of harvester reporting in the Maine lobster fishery, particularly looking at the resulting CVs. TC examined the effect of increasing the percentage of harvester reporting from 10 percent through 50 percent in 10 percent intervals through bootstrapping the CVs for trap hauls from the Maine Harvester Logbook data.

Increasing sampling effort decreased trap haul CVs from around 3.5 percent at 10 percent proportional reporting, to 1.2 percent at 50 percent proportional reporting. TC found consensus that with already low CVs at 10 percent, increasing reporting levels provides marginal benefit and a potential high cost with current paper logbook methods.

With marginal statistical benefit for increasing the reporting between 10 and 100 percent, the TC suggests that resources could be better spent developing approaches to electronic reporting that could make 100 percent coverage feasible and efficient, than by increasing the coverage using current methods.

The next question the TC tackled was if we could improve the sampling efficiency using the current expended resources. First we had to evaluate the appropriate stratification factors. We used generalized linear models to determine significant factors that explained

deviance in the models, and found that license class and status were most important.

Surprisingly, zone or the spatial coverage across the state was relatively unimportant for explaining variance in metrics. One problem with harvester reporting stratified by license class is that many licenses are not actively fished in the given year; and thus a portion of the harvester reporting resources are being assigned to such latent licenses. Sampling of latent licenses occurs, because vessels are selected for reporting in the coming year based on the license type they purchased in the previous year, thus incurring a two-year lag between the basis for selection and actual reporting.

We looked at the patterns of latent licenses. We found that annually about 25 percent are latent and that is stable over time. But the status in the selection year cannot always predict the activity in the reporting year. A certain proportion of each license class and status change between active and latent between their selection and reporting year, and it was different for different license classes.

I know you can't really read the axes on here. To give you an example, on average for LC-3 licenses, those are the biggest businesses that were latent in the selection year, 50 percent became active in their reporting year two years later. For LC-1, they had less than 25 percent activation; so it is different for different license classes.

With the knowledge of the important factors of license type and activity status, we can improve sampling efficiency and precision of the harvester reporting program in Maine with current resources, or can we do that? With the large number of latent permits being sampled, particularly for LC-1, we determined that efficiency in harvester reporting could be gained by taking a vessel's history of status, active or latent, into account when selecting vessels for coming years.

To address the different patterns within the stratification, using license class and status, we explored an optimal allocation approach rather than a proportional one. We created a function that balances the variability, the cost, and population size within each strata, and calculated an optimal allocation for each effort metric.

This could decrease the number of vessels required to report, but it would increase the amount of useful data from the active portion of the fishery. This is the allocation for each metric, with the average traps landings, max traps, total soak nights, trap hauls, and trips. Just following the trends in these figures, there was more allocation for the active LC-2 and LC-3.

We chose to focus on the metric of total annual trap hauls to optimize the allocation for the dataset. Using trap hauls as their optimizing metric, the optimal approach fine tunes the CVs from 10 to 50 percent, again with the marginal statistical benefit for increasing the reporting higher than 10 percent.

In discussion, the TC strongly supports the future goal of 100 percent harvester coverage through electronic reporting. A hundred percent harvester reporting could produce a more perfect dataset of actual trap hauls and a spatial extent of the fishery, to better answer the spatially specific management questions.

That said the current 10 percent reporting program is statistically valid for Maine; because of the large scale of the fishery. There is marginal benefit of increasing coverage between 10 and 100 percent, considering the size of the fleet and the high cost of submitting on paper reports in the associated data entry. Until electronic reporting is developed, the current proportional method can be fine tuned using an optimized sampling approach. This recommendation would focus the program on active permits; while still accounting for the unpredictable, latent effort to characterize the whole fishery. If adopted, optimized sampling

levels should be revisited every three years, until 100 percent is achieved, because the CVs could be impacted by changes in operational fleet dynamics like trap hauls, population size within each strata, or generally the scale of the fishery.

Moving on to the second task, the TC evaluated the current fishery dependent bio sampling programs. Sources of these data are the state programs, NOAA Fisheries, including the standardized bycatch reduction methodology or SBRM, and the Commercial Fisheries Research Foundation or CFRF.

The TC depends on bio sampling data to provide sex ratios, and length compositions to characterize each area for the stock assessment. Fishery dependent programs can be port or sea sampling. Sea sampling is typically preferred, because it includes data on both the harvested and discarded portions of the catch; while port sampling often is the most feasible, because it is land based, but only provides information about the harvested catch.

In the past the TC has applied a standard of requiring at least three samples from each statistical area, quarter and year to have adequate coverage. The problem is that historically regions of the lobster fishery have not achieved this minimum sampling standard, leading to gaps in the bio sample data, especially offshore, in southern New England, and in the winter months.

Past stock assessments have required gap filling or borrowing data from adjacent statistical areas, quarters, or years; increasing uncertainty in the models and results. Sea sampling is preferred, but as I said logistically difficult offshore and during the winter; and can be costly compared to port sampling.

The TC evaluated the available data in 2015, and '16. I have to apologize here. Some of the maps in your briefing materials are incorrect, and need to be revised. Megan tells me these

will be corrected in the final meeting documents that will be posted online. But these maps are correct. This figure shows maps of the statistical areas where the stock assessment uses data.

Each window is a quarter from summer, fall, winter, and spring; and the white areas are ones where we have the standard three samples per statistical area and quarter in both of the past two years. The areas with color are where we are missing the standard three samples, and the color scale indicates the level of landings in thousands of pounds for each area.

Warmer colors are more landings that are unrepresented in the bio samples. As expected, the best available coverage comes with a combined port and sea sampling from all sources. The inshore areas are well covered by existing, mostly state programs. But there are a number of offshore and southern New England statistical areas with data gaps; especially in the winter.

Because of the importance of characterizing the discarded portion of the catch, we also looked at the available sea sampling only data, and found the coverage decreases further in some offshore areas. In the past two years we actually had more sampling effort than available previously, because of NOAA's SBRM program increasing the priority to look at bycatch in the lobster fishery. They increased their number of trips, and the Commercial Fisheries Research Foundation, collaborating with fishermen to collect data. Both of these programs are highly dependent on funding, in such that the SBRM did a large amount of sampling in 2015, and almost none in 2016. Without these efforts the offshore areas have very little coverage, as you can see in the right figure. It's almost all colored.

Considering the importance of the lobster fishery in the U.S. and continued area-specific-management questions, the TC continues to advocate for a greater priority in fisheries

dependent sampling funding, to achieve the minimum three samples for each statistical area and quarter per year, especially for landings of high landings to reduce uncertainty in the stock assessment. Sea sampling data is preferred, but port sampling is acceptable if nothing else is available.

We recommend that NOAA Fisheries implement a lobster bio sampling program that increases coverage offshore. This program should be independent of SBRM, stratified by statistical area, and coordinated with other state and federal programs to avoid overlap and increase efficiency. The TC also recommends reevaluation of these priorities within the assessment process, to accommodate changes in the fishery and landings patterns. Thank you, I welcome any questions.

CHAIRMAN BORDEN: Questions for Kathleen, any questions? Pat.

MR. KELIHER: In deference to my good friend, Dan McKiernan and the Commonwealth of Massachusetts, I just want to make sure it's clear that it looks like 10 percent is statistically viable. I am withholding my urge to jump up and start a wave around the room.

CHAIRMAN BORDEN: Dan, would you like to rise to the bait, or the fly I should say?

MR. MCKIERNAN: If there is a hat I can eat, I guess I'll eat my hat. I would like to congratulate the state of Maine and the TC for a great presentation. One thing that does strike me though is maybe one of the reasons that the precision is as good as it is, maybe Maine's fishery is a little more homogeneous than maybe people had thought going in.

What strikes me is, while the analysis is great, what is missing is actually a summarization of effort. I think going forward; since the document has demonstrated that there is adequate precision in some of these parameters. It's time to present those parameters. I think all the states should

probably be collecting and presenting more precise and comprehensive data on effort, active permits, traps fished and trap hauls; especially now that we're comfortable that Maine's data will actually be valid and statistically accurate. It's really good news.

CHAIRMAN BORDEN: Jay.

MR. JASON McNAMEE: I just wanted to complement the TC; this is a fantastic job, really thorough analysis. You guys did a bang up job. I have two questions for you. I just didn't see it in either of the report. You guys may have done this. You allude to the fact that a lot of those favorable statistical qualities from the Maine sampling program is due to that large sample size.

It usually is the key for good statistics. I wondered, and you sort of showed this. I hope that sample size stays high forever, just to make sure that's clear. But I wondered; did you guys talk about maybe some criteria where if that sample size decreases, presumably the CVs would decay at some rate. Did you guys talk about some criteria of where that 10 percent might not be valid anymore, like what that sample size needs to stay at? Then I have a second question, Mr. Chair that is somewhat related, once Kathleen answers.

CHAIRMAN BORDEN: Kathleen, do you want to respond to that and then I'll come back to you, Jay for a second question.

MS. REARDON: Yes. The scale of the fishery is something that we discussed a lot. That was one of the reasons for the recommendation to revisit every three years; because of potential change of scale of the fishery, but also we noticed that there were dynamics between the license classes that were shifting over time, even over the period of time that we were evaluating. It is important to look at that over time.

CHAIRMAN BORDEN: Jason.

MR. McNAMEE: That makes a lot of sense. Then just to follow on. The CVs are small, but the fishery is big; and so I wondered if you also investigated, while it might be a small proportional change, did you guys investigate so if it was the high end of that 0.02. Is that a lot of landings to the point where it's impactful potentially to the stock assessment?

The CV represents the uncertainty, so if you were at the high end of that uncertainty, given the magnitude of the fishery, while the proportion is small the magnitude might be high. Is it high enough to have an impact to potentially stock assessment outputs and things like that?

MS. REARDON: I would point to the slide that compares the harvester landings expanded up to the dealer landings; in that it does represent, if we consider the dealer landings as true, the harvester landings when you expand it and scale it up to the whole fishery, can represent the total.

I think every year except for one fell within the 95 percent confidence interval. I think that we feel pretty confident that especially looking at it that it was able to go with the increase of landings between 2008 and 2015. If it was able to track those increases, just with harvester reports, we feel confident that we would be able to track changes.

CHAIRMAN BORDEN: Are there any questions for Kathleen? Pat.

MR. KELIHER: Kathleen that was a great presentation, aside from my giddiness over the 10 percent. Jay, I'm not going to move for a 5 percent sample size. I do, Mr. Chairman, want to point out that the comment by the TC in regards to the cost benefit of going to 100 percent, and it's still their desire to go to 100 percent reporting.

But electronically is a really important one here, and one that the Board should not just glance over, because I think we have a situation here

both from the science perspective, but also from an enforcement perspective that we shouldn't lose sight of. The idea of going in the direction of electronic reporting that can both be from a harvester perspective, a dealer perspective, and from an enforcement perspective, can't be lost. We need to, I think highlight that and have a much higher focus on those items. The paper, going to 100 percent for the state of Maine from a paper exercise was about a half a million dollars a year. Let's try to find a way to reinvest those types of dollars and move forward with a strong electronic component.

CHAIRMAN BORDEN: Is there anyone else? Ray.

MR. RAYMOND W. KANE: Thank you for the great TC report. I make reference to Pat's statement. That was going to be my question. Did the TC put a timeframe on electronic monitoring when they would like to see it, in fact, in play?

MS. REARDON: We did not put a timeline on it. I think we know that Maine is looking at electronic reporting; and the addendum also looks at electronic reporting and trying to push that. It's when it's feasible and can produce accurate reports, I think. But we do not have a timeline.

CHAIRMAN BORDEN: Jay and then Dan.

MR. McNAMEE: Just quick on the tail end of the presentation there. This is probably more of a comment than a question. But I noted in the TCs recommendations on that bio sampling. One of your recommendations was for NOAA to increase some of that sea sampling. I just wanted to make the comment. I think the other thing your presentation showed was the value of that industry collaborative information. That should be a part of that investigation.

I think that might be a cost effective way, maybe that can be expanded as well or in lieu of, probably not in lieu of, but as well. I just

didn't want to lose that point. I think that CFRF industry collaborative collected information. Those guys are out there. If they're willing to collect information for us, we should take them up on that offer. I just wanted to make sure we didn't lose that point.

CHAIRMAN BORDEN: Kathleen, to that point.

MS. REARDON: I think that was actually something we looked over. We should have said make sure that there is funding for those industry collaborative efforts; because the data is definitely very useful, and it's collected in a cost efficient way.

MR. MCKIERNAN: I would like to again agree with Pat Keliher about the need to get to that next generation of technology, for purposes of collecting fishery data, and that would be a great outcome. My question to you is, if I were to ask for support to include in future plan review reports, effort statistics. Would it be later in the meeting when we're going to review that report, or would it be now?

MANAGEMENT ISSUES AND ALTERNATIVES

CHAIRMAN BORDEN: Later. Is there anyone else on this segment of the report? If not we're going to move on to Megan's report.

MS. WARE: I will be reporting on Lobster Draft Addendum XXVI, which is also Jonah Crab Draft Addendum III. This is the first change that I'm going to talk about today. This is now a joint addendum for both species. Given the Jonah Crab Fishery is jointly managed by the Lobster Board, and reporting requirements in the two fisheries do mirror one another, this addendum is proposing changes to the reporting and biological sampling requirements in both the lobster and Jonah crab fisheries. Setting the stage for this addendum, the problems we are trying to address are that current harvester reporting requirements do not provide the level of information needed to respond to outside management issues. While the lobster fishery continues to move offshore, and we have an

expanding Jonah crab fishery in federal waters, the majority of our biological sampling is occurring inshore.

Our goals for this addendum are to utilize the latest technology to improve reporting, collect greater effort data, increase the spatial resolution of harvester reporting, and advance the collection of biological data offshore. As a reminder to our timeframe, the Board initiated this addendum in January, and then between February and October the Plan Development Team and the TC completed their components.

We are considering this for approval for public comment today. If it is approved, then our public comment period would be November through January, and the Board would take final action in February. Kathleen touched on this a little bit, but just a reminder of our current reporting requirements.

Under Addendum X it's a minimum of 10 percent harvester reporting, with the expectation of 100 percent reporting over time. Some of the data components that we collect in harvester reports are things like stat area, number of traps hauled, number of traps set, the pounds harvested, and then also the trip length.

There are also biological sampling requirements. Right now there is a sea and/or port sampling requirement. It is supposed to be weighted by area and season, to match the three-year average of commercial catch. However, this volume of sampling well exceeds current state budgets. This has not been something that the states have been achieving.

De minimis states are required to conduct one of the following surveys, either a trawl survey, a ventless trap survey, or a settlement survey. For Jonah crab, many of the requirements mirror those in the lobster fishery; and states were asked to extend their lobster sampling programs to Jonah crab.

Starting off with harvester reporting, there are three main issues that we've come across. I think the largest one is the lack of spatial information that is collected in the fishery. Right now we collect information by statistical area; however, this is too coarse to respond to many management actions, and an example would be the Council's Deep Sea Coral Amendment, which looked at very specific coral regions.

To estimate economic impacts for that coral amendment, information from harvester reports, surveys and industry interviews had to be pieced together to come up with some sort of economic impact. Another challenge is that not all states are collecting information by LCMA. There can be multiple LCMAs in a single statistical area. It's not always simple to assign landings to a management area.

An example is Area 521 that spans Management Area's 1, 2, 3, and outer Cape Cod. The second deficiency is the lack of information that is being collected on the depth. This is an issue given many management actions, including that coral amendment, as well as the National Monument were considering various options based on depth zones. We did not really have the information on where the fishery is being prosecuted, to answer those questions. Then our third deficiency is not all harvesters are required to report. As Kathleen just talked about, Maine accounts for over 80 percent of lobster harvest; but only has 10 percent harvester reporting. This is largely due to the size of Maine's lobster fishery, which has more trips taken in the lobster fishery than all trips in most states fisheries. Then there is no reporting requirement for lobster, only federal permit holders. Those permit holders are not required to report through VTRs.

Looking at some of the biological sampling deficiencies, while our surveys span a broad length of the coast, most surveys are conducted within 12 miles of shore. This is of concern, given that the majority of landings in southern

New England and an increasing portion in Gulf of Maine are coming from that offshore area.

As Kathleen just talked about, the TC has identified data gaps in the fishery by comparing that sea and port sampling effort to the magnitude of landings. The greatest data caps appear to be in Georges Bank and offshore Gulf of Maine, with some in southern New England. Before going through the management alternatives, I do want to note that the Atlantic Large Whale Take Reduction Team has been discussing deficiencies in the collection of fishing effort data.

That data goes into their co-occurrence model, which predicts where gear and whales overlap. That team is considering an annual recall survey; which would be sent to fishermen to collect additional effort data. Some of the information they're interested in collecting is the color of the buoy, the weight of the trap, number of traps per trawl, buoy configuration, buoy line diameter, the weight of anchor lines, and the color of the buoy underside.

This addendum does provide an opportunity to proactively address some of these data concerns. However, the PDT did feel that many of these data components are more specific than what is typically required in a trip level report. Another kind of confounding part of this is that many state level reports are used for multiple species.

We need to think about how those reports would be impacted for other species. I raise this to the Board, to note that there are management alternatives in this document which add some of these data components to trip reports. However, there is not an option which adds all of these data components to a trip report.

There is an ability to collaborate on this issue; and I think that collaboration potential increases with electronic reporting, so that is something that could be discussed down the road. We'll go into the management issues and

alternatives. Our first issue asks what the percentage of harvester reporting should be in the lobster fishery.

Option A is status quo. We would maintain that minimum 10 percent reporting requirement, with the expectation of 100 percent reporting over time. States with a higher level of reporting would be required to maintain that higher percentage. Option B, states maintain their current reporting effort.

If a state is at 100 percent reporting they maintain that percentage. If a state is at less than 100 percent reporting then they maintain that current level of effort; but distribute through an optimal allocation. That's what Kathleen was talking about in the TC report. There is an expectation of 100 percent reporting overtime through the use of electronic reporting for Option B. Then Option C is 100 percent harvester reporting, so all states are required to implement 100 percent reporting, and if a state is not at that percentage right now, it can be phased in over five years. The addendum does highly encourage electronic reporting; and this has been supported both by the PDT and the TC. Some advantages of electronic reporting are that it's a cost effective method to increase the reporting percentage, and it also provides flexibility to collect expanded data elements, and specifically here for that Take Reduction Team that could be important.

The addendum recommends that states use the SAFIS application eTrips or eTrips-Mobile. This can be implemented at little to no cost to states. It is approved by GARFO for EBTRs, and there is a well-established relationship between ACCSP and ASMFC. The addendum does allow states to use a different electronic reporting platform; but it must be API compatible, which basically means that the data can be consolidated with other sources.

If a state was interested in a different platform, then they would submit a proposal to the Board, demonstrating that that platform meets

the reporting requirements in this addendum, and can accommodate the scale of the fishery. This is Issue 2, and it's asking what data components that we should be collecting in harvester reports.

Under Option A, it is status quo, so we would continue to collect information on things like the stat area, the number of traps hauled, the number of traps set, the pounds and the trip length. Under Option B we would expand those data elements; so we would include depth, bait type, which will give us a bit of economic information on this fishery, and soak time.

I will note that states are collecting soak time information now, so Option B would codify that ongoing practice. The Option C specifically is asking about gear configuration elements. Again, this is addressing some of those Take Reduction Team data needs. We would add number of traps per trawl, and number of buoy lines.

I will note that Options B and C are not mutually exclusive, so the Board could choose to implement both Options B and C here. Then Issue 3 asks about the spatial resolution at which we collect data. There are five options here. Option A is status quo. We would continue to collect information by stat area.

Option B is stat area and LCMA. Option C is stat area and distance from shore, so this would provide landings based on inshore, nearshore, and offshore. We define that as 0 to 3 miles, 3 to 12 miles, and greater than 12 miles. Option D is 10 minute squares, and I'll show a figure of what that looks like.

It's going to be a much more specific grid on which we would report. This is our coastline here, and the black lines are the LCMAs. Then Option E is electronic tracking. This is saying that the Board is interested in pursuing electronic tracking. One of the challenges with electronic tracking is that the fishery does cover a wide geographic area, and it is conducted on a wide variety of boats with different capabilities.

We need to identify technologies that meet our data needs; but are also compatible with this range of boats and climates. The PDT did consider VMS; however the Law Enforcement Committee has noted that one of the most important features here is a fast ping rate, so that we can decipher between trap hauling and steaming. The VMS does not have this type of fast ping rate. Under Option E, the first step is a one-year pilot program to test electronic tracking devices in the fishery. We will put together a subcommittee comprised of LEC reps, industry members, and Commissioners to design and implement this pilot program. The success of the different technologies would be evaluated based on compliance, ability to determine trap hauling versus steaming, industry feedback, cost per fisherman, and LEC feedback.

Then after that one-year pilot program, the Board can choose to end the program and not pursue electronic tracking, extend the program to potentially test different devices, or pursue the implementation of tracking in the fishery. I will also note that Option E can be chosen with one of the options above. The Board could choose Option B and Option E as an example.

For biological sampling, we'll continue to maintain the requirement that non de minimis states complete either a trawl survey, a ventless trap survey, and/or a settlement survey. However, under this addendum we would set a minimum biological sampling threshold of ten sea or port samples in the lobster and Jonah crab fisheries.

This is hopefully a more realistic baseline for states. It's not representative of the population. If a state comprises more than 10 percent of coastwide landings in either the lobster or Jonah crab fishery, then they would be encouraged to conduct additional sampling trips. For example, if a state accounts for 20 percent of the lobster fishery, then they would conduct 20 sampling trips.

If a state is unable to complete those ten trips, they must notify the Board in the annual compliance report as to why that sampling was not conducted and then future sampling efforts. The final thing I'll note about the addendum here is that there is a much more extensive section that includes recommendations in federal waters.

There are three primary recommendations there. The first is to establish a harvester reporting requirement for lobster only federal permit holders. Again, there is no reporting requirement attached to a federal lobster permit. This could be impeding effective management; as it is unclear where lobster and Jonah crab are being caught, and with what effort.

This is recommending that there be a reporting requirement to the percentage approved by the Board in this addendum or higher in each statistical area. The second recommendation is for the creation of a fixed-gear VTR. Right now there is a single VTR form for all gear types; and that is limiting the amount of data that can be collected specific to fixed gears.

This would allow for greater data to be collected, and also clarify what is really being asked for each gear type. Then the third recommendation is implementation of a targeted lobster sampling program in federal waters. Again, we've seen increased harvest and effort offshore, and so based on the TC report there is a sampling program that is recommended in federal waters; and that is included in Appendix 3 of the Addendum. With that I will take any questions.

CHAIRMAN BORDEN: Questions for Megan. Before I take hands up, I just note that this is kind of the first time you've seen this addendum. There are requirements for states to take additional action, which are going to require more resources. I just urge everybody to factor that into your thinking.

I mean the paths forward from my perspective are, we take action today or amend this in some manner, take actions on it. If there is a desire on the part of the Board members to modify it, we could ask the PDT to modify it and bring it back at the next meeting. The third path forward is to modify it, and do a final approval at the winter meeting. First, let's start with questions. Dan.

MR. McKIERNAN: Will the proposed reporting system allow the fishermen to delineate target species, for example Jonah versus lobster, even when the trap is the same? To follow on that question, will the reporting system allow a whelk trap or a fish pot to be separated from a lobster or Jonah trap?

CHAIRMAN BORDEN: Megan.

MS. WARE: The addendum does not require, or there is no question that asks, what your targeted species is at this point, as a data component, so we can add that if you're interested. In terms of the other, like a whelk trap, I think that might fall as to what your state's reporting requirements are for the whelk fishery. These would be specific to people with a lobster permit, so if a whelk fisherman had a lobster permit then I think they would be impacted by this, but otherwise not. But I'm not sure how your state permitting works.

CHAIRMAN BORDEN: Anyone else, questions? No hands up, so preference of the Board. Dan.

MR. McKIERNAN: My question is to Pat Keliher. Given the Maine Fishermen's Forum is usually held at the beginning of March. Would it make sense to have the comment period take place in a window that includes the Forum; in terms of the timing of this?

MR. KELIHER: Megan, what was your window for a comment period?

MS. WARE: If this gets approved today than it would be November through January. I would

present those comments at the February Board meeting.

MR. KELIHER: I think for this particular issue, if we were talking about trap reductions I would probably agree with that Dan, but I mean for this particular issue I think we would probably only hold a couple different meetings within the state of Maine, and doing it in that timeframe works.

CHAIRMAN BORDEN: Toni.

MS. TONI KERNS: I was just going to say you can extend it for as long as you want, and have it open for as long as you want. But with Pat's answer it really doesn't matter.

CHAIRMAN BORDEN: Are there any other questions? Doug.

MR. GROUT: It's not a question. I just had a suggestion for another sub-option to consider whenever you're ready for it, Mr. Chair.

CHAIRMAN BORDEN: Go ahead, please.

MR. GROUT: One of the issues we've dealt with in New Hampshire, is we have a core level of full-time fishermen that are very active in this; and then we have a lot of part timers. We do have a hundred percent mandatory reporting of all our commercial and recreational harvesters. But we don't have it to the trip level, except for these full-time harvesters. The other ones are a monthly summarized reporting system. We're getting the landings but not the specific detail. What I would like to offer is a sub-option for consideration in this addendum. As a sub-option under Option C, if perchance we were to go down the road of 100 percent harvester reporting.

I would like to move to add a sub-option under Issue 1; Option C that would allow commercial harvesters with less than 1,000 pounds of landings in the previous year to report monthly summarized landing data instead of trip-level data. I did e-mail this to both Megan

and Max, if they have access to their e-mail, if you would like me to read it again.

CHAIRMAN BORDEN: Do we have a second to the motion; seconded by Pat Keliher?

MR. GROUT: Just a follow up if I might Mr. Chair, is what we've found with going down this road is 31 percent of our licensed commercial harvesters report trip level data. That accounts for 94 percent of our total landings; this remaining 69 percent, which are these very part-time people that land less than a thousand pounds per year account for 6 percent of our landings. This has helped us manage, get very high resolution data, trip level data on the fishermen that account for 94 percent of our landings, and then we get the landings data on the remainder of them.

CHAIRMAN BORDEN: Questions or comments on the motion? Eric.

MR. ERIC REID: A thousand pounds of what?

MR. GROUT: Lobsters.

MR. REID: Okay, well it should probably say that because if it's a thousand pounds of everything, you might have a problem.

CHAIRMAN BORDEN: Are there any other comments on it? Dan.

MR. MCKIERNAN: Doug, is it your assumption that that thousand pounds of lobsters represents all of the commercial activity of that permit holder, and that there isn't other data that you would want to be collecting on some of the other fishing activities?

MR. GROUT: Explain to me what you mean by other fishing activities, because if they're for example, people that are also gill netting for other species within our waters. That's covered under a different permit.

MR. MCKIERNAN: If they're harvesting urchins or scallops, or I don't know the intricacies of

your fleets and the levels of activity. But in Massachusetts we could have someone who is almost a full-time-commercial fisherman land less than a thousand pounds of lobsters; but we still want that data collection at trip level.

MR. GROUT: Again, if it goes to other species that's another, if they're federally permitted, clearly they are required to fill out their other species, like if they had a scallop permit they would be required to fish that. If they're fishing exclusively within state waters, we have a harvester report, so they would have to fill out that separately. We do have those covered, and we also have the ability to validate whether they have landed less than a hundred pounds in the previous year, by looking at the dealer data.

CHAIRMAN BORDEN: Pat.

MR. KELIHER: I certainly don't have a problem with adding this to the document. I bumped this off to staff real quick, just to try to get a quick read on it, and one of the comments I got back was that it may to be a two-year lag and not a one-year lag, but I think those are conversations we can have after we get into it. I also believe that the optimized approach may get to this within the document, as a way to look at it. But I do support it going into the document.

CHAIRMAN BORDEN: Any other discussion questions on it? Is there any objection to the motion? **No objection, the motion stands approved by unanimous consent. Okay anything else on this?** What is your preference? Do you want to have a motion to approve this for public hearing process as modified by the discussion today, or do we want to deal with it at the winter meeting? What is the preference? Pat.

MR. KELIHER: I would move, Mr. Chairman that we move to adopt the Lobster Draft Management Addendum III for public comment as amended.

CHAIRMAN BORDEN: **As modified by the discussion today.**

MR. KELIHER: **Correct.**

CHAIRMAN BORDEN: Dennis Abbot second, discussion. **Any objections to the motion, no objections the motion stands approved by unanimous consent.** Dan.

MR. McKIERNAN: Megan, my only request is when we publish the document, if you could make the comment period a couple of days after the MLA annual meeting. That would make my life a little easier. Their meeting is scheduled for the 19th to the 21st in January. If we could let that public comments go a little beyond that.

CHAIRMAN BORDEN: I think that's possible. We can include a notice right in there that in order to make your life easier we're going to extend the comment period. We've got a few more items on the agenda. That concludes this.

STATE AND FEDERAL INCONSISTENCIES IN LCMA 4 SEASON CLOSURE

CHAIRMAN BORDEN: Okay so the next item is Item 6, which is the issue of State and Federal Inconsistencies. We had a postponed motion that will go on the table.

Before I declare that on the table, what I would like to do is have Megan just remind us of where this has been. There have been discussions by some of the individuals around the table that have slightly different opinions on what to do. But I think they've crafted a substitute motion that we can deal with. Megan.

MS. WARE: Just a reminder, this is in regard to the Area 4 Season Closure. We had received a letter from New York and New Jersey, asking that the different regulations in state and federal waters be addressed; specifically the application of the most restrictive rule and the requirement that traps come out of the water in federal waters. This was the motion that was made at the August Board meeting, and then it

was postponed. I think everyone has had a chance to discuss it, so I'll open up the floor for a substitute motion.

CHAIRMAN BORDEN: Jim.

MR. JAMES J. GILMORE: Are you clairvoyant? You knew it was coming to me? We've had some discussions with NOAA Fisheries, particularly Pete Burns. The first part of this motion actually is not allowed by the Service, so essentially we couldn't do that motion and still be consistent with what the Feds are doing.

However, with those discussions there are conservation equivalent measures that we consider for Area 4. To address that we're going to go outside of the meeting and have meetings with New Jersey and the Feds to come up with some of those measures, to try to address that first point. Then secondly, the second point is allowed under the federal rules; but we would have to do some regulatory changes. I think the solution we've come up with is a substitute motion, and Megan if you could put that up.

CHAIRMAN BORDEN: Before you do that Jim, let me declare that the motion is on the floor, and if someone would like to make a substitute motion, which Jim is going to make, you can do that.

MR. GILMORE: Do you want me to read it first and get a second? How do you want to do this?

CHAIRMAN BORDEN: Do you want to read the motion?

MR. GILMORE: Yes. Move to substitute (1) LCMA 4 states, New Jersey and New York will work with representatives from NOAA Fisheries, to develop conservation equivalent alternatives for the current LCMA 4 season closure. We request that the Technical Committee review the alternative management measures, to assure that the conservation goals of Addendum XVII are met;

and (2) The LCMA 4 seasonal closure relates only to LCMA 4.

Permit holders with an LCMA 4 designation in another lobster management area designation on their lobster permits would not have to similarly remove their lobster gear from the other designated management areas during the LCMA 4 closed season. This also applies to seasonal closures in other LCMAs.

CHAIRMAN BORDEN: All right we have a second, yes Tom; discussion, Jim, any further discussion?

MR. GILMORE: Just my favorite part of working with the Feds is brevity is never a solution to an addendum. But I think it fixes the problem on both issues, so I think we're fully supportive, the Feds are on board with it, and if Pete has anything else he wants to add I would appreciate it.

CHAIRMAN BORDEN: Tom, as a seconder, do you want to comment at all?

MR. TOM BAUM: No, I'll defer to Pete.

MR. BURNS: I appreciate the work of the staff with New York DEC and with New Jersey Fish and Game. We talked about this a little bit. I think that we can support certainly working with those states, and with the industry to come up with some conservationally equivalent alternatives to the Area 4 closure that might work a little bit more consistently across state and federal lines. Certainly the second part is a little bit more specific to the issue than the original motion was. I think we can certainly support that because the language is almost the same as what we have in our federal regulations.

CHAIRMAN BORDEN: Anyone else want to comment on the motion? Is there any objection to the motion? **No objections, the motion stands approved by unanimous**

consent; moving along, next item on the agenda.

MR. ADAM NOWALSKY: Point of order.

CHAIRMAN BORDEN: Oh, we've got to vote on it finally. Thank you, Adam. Are you ready for the question? We need to vote on this as a final action, right? **We're voting on the main motion, which is on the board. The substitute has been approved. Is there any need for an actual vote? If not any objection to approving it by unanimous consent, no objections it stands approved.** Next item is Consider Approval of the 2017 FMP Review.

CONSIDER APPROVAL OF 2017 FMP REVIEW AND COMPLIANCE REPORTS

AMERICAN LOBSTER

MS. WARE: Today we have two FMP reviews. We have the Lobster FMP Review and then our first Jonah crab FMP review. We'll start with lobster. The graph on the screen is commercial landings. The lobster fishery has seen incredible expansion in landings over the last 40 years. In 2016 coastwide landings were 158 million pounds, which is the highest on record.

The largest contributors to the fishery are Maine in blue and Massachusetts in red, with 83 percent and 11 percent of landings respectively. Maine, New Hampshire, and Massachusetts all had record high landings in 2016. As a result, 98 percent of landings are coming from that Gulf of Maine/Georges Bank stock.

The ex-vessel value for lobster was 666.7 million, which again is another record for lobster. We are still under Amendment 3 and Addenda 1 through 24. Under Addendum XVIII, LCMA 2 and 3 implemented trap reductions, and ahead of the 2017 fishing year both areas had a 5 percent trap reduction. That came out to 6,781 traps retired in Area 2, and 8,008 traps retired in Area 3.

Those numbers do include traps that were retired to that trap transfer conservation tax. There is a requirement for non de minimis states to conduct surveys. Today I'll be showing the Maine/New Hampshire surveys and the Rhode Island surveys, just for some regional comparisons. But the other surveys are in the FMP review.

For the Maine/New Hampshire trawl survey, the spring abundance which is on top had an increase from 2015, while that fall survey abundance slightly decreased from 2015, but still well above the time series average. In contrast for the Rhode Island survey, all abundances were low. The fall sublegal abundance did show a slight increase in 2015 and 2016.

Next slide is the ventless trap survey, so again it will be Maine on the left and Rhode Island on the right. For Maine there were increases, the number of sublegal and legal lobsters caught in the 2016 ventless trap survey, as compared to 2015. In Rhode Island the CPUE of sublegal lobsters has increased since 2014, but that CPU of legal lobsters has remained fairly steady. Then this is the settlement surveys for the two states. In Maine the settlement surveys in 2016 continued to show low values in all statistical areas. Similarly in Rhode Island, those settlement survey indices were down from 2015. In terms of state compliance, all states are found to be in compliance with the biological management measures; however Rhode Island and Connecticut did not conduct any sea sampling per Addendum X.

States did note staffing and budget constraints. For de minimis status, it's defined as commercial landings in the two most recent years of data do not exceed an average of 40,000 pounds. We had requests from Delaware, Maryland, and Virginia; and all three states qualify. For PRT recommendations, the PRT recommends the Board approve de minimis status for those three states.

The PRT does note an increase in the number of enforcement concerns reported in state compliance reports, and recommends improved enforcement, especially the at-sea enforcement of trap limits. The PRT recommends the Board investigate the best way to quantify effort in the lobster fishery.

There are several ways to measure effort. We can look at the number of permit holders, the number of trap allocations, number of trap hauls. Historically the Board has limited effort through trap allocations, but the effectiveness of trap allocations to reduce effort is confounded by their relationship to trap hauls, and the expansion of the Jonah crab fishery.

Finding a way to monitor the true level of effort in the fishery would provide the Board with much needed information. Then finally, the PRT recommends investigating the connectivity between the offshore portion of southern New England and Georges Bank. With that I will take any questions, and that is kind of the motion we would be looking for.

CHAIRMAN BORDEN: Questions. Emerson.

MR. EMERSON C. HASBROUCK: Thank you, Megan, for your presentation. I think there was a typo there, unless something is going on in Maine that we don't know about. I don't know why we would want to declare Maine de minimis in the lobster fishery.

MS. WARE: I was just making sure you were paying attention.

CHAIRMAN BORDEN: Pat seconded that motion. Okay, so any questions? No questions, does someone care to make this motion? I think we have to have an actual. Mark.

MR. MARK ALEXANDER: I would just like to amend this motion to include Connecticut as a de minimis state. In the compliance report it was an oversight on my part. I did not request that. Connecticut's three-year-average landings are an order of magnitude less than the 1

percent threshold. Even the highest year in the past three years is only about 0.3 percent.

CHAIRMAN BORDEN: If you would like to make the motion and do that you're free to do that.

MR. ALEXANDER: I would like to make a motion. Sorry, Megan?

CHAIRMAN BORDEN: You're free to do that. To include a motion, in other words you're making the motion on the board which includes Connecticut.

MR. ALEXANDER: I'm making a motion to amend to include.

CHAIRMAN BORDEN: There is no motion on the table. If you want to make that as a motion and include Connecticut; in terms of de minimis, you can do that.

MS. WARE: I'll just jump in here. I think you mean for Jonah crab, which will be the next one. This is for lobster. No worries.

CHAIRMAN BORDEN: Does someone want to make this? I think we need an actual motion on this. Doug.

MR. GROUT: Move to approve the 2017 Lobster FMP Review State Compliance Reports and de minimis status for Delaware, Maryland, and Virginia.

CHAIRMAN BORDEN: Is there a second, seconded by Roy? Any discussion on this, is there any objection to the motion? **The motion stands approved by unanimous consent.** Megan.

JONAH CRAB FMP REVIEW

MS. WARE: We'll move right along to the Jonah Crab FMP Review. This is the first FMP review for the species. Again, similar graph here showing commercial landings, in 2016 there were 15 million pounds of Jonah crab that were landed along the coast, representing 11.9 million pounds in ex-vessel value.

The states with the two highest landings are Massachusetts in gray with 68 percent, and Rhode Island in yellow with 24 percent. In terms of status of the stock, the status of Jonah crab is relatively unknown, and no coastwide stock assessment has been conducted. The TC did meet via conference call to discuss what data elements would be needed to conduct a coastwide stock assessment.

They developed the following list of research topics. Information on growth rates, there has been some regional studies, but confirming that that is representative of the whole coast. Molt frequency and molt increment, again maturity in different regions, there have been some studies conducted, but not coastwide.

Size ratio of mating crabs and sperm limitations, mortality rates in the claw fishery; there has been an in-lab study, but confirming that those rates are still true in the field. Migration, there are several ongoing tagging studies. Hopefully we'll be able to check the box on that issue there; and then an estimate of natural mortality.

In terms of status of management, we are under the FMP, as well as Addendum I. I will note that Addendum II, the implementation date for that is January 1, 2018. That established the coastwide standard for claw harvest, as well as defined bycatch. Some states have implemented this, for those who haven't that is the deadline.

States were asked to extend their sampling programs to Jonah crab. I'll be showing the Maine surveys and the Massachusetts surveys; again just for some regional differences here. But the other state's information can be found in the FMP review. This is the Maine/New Hampshire trawl survey. Spring is on the top, and fall is on the bottom. The spring abundance indices have significantly increased since 2013. In the fall the abundance indices for Jonah crab were slightly less than 2015; but still well above the time series average.

Then this is the Massachusetts trawl survey; we have spring on the left and fall on the right. Similar story here, so there is an upward trend in relative abundance in both seasons; particularly in the spring survey since 2010. In terms of state compliance, most states are in compliance with the FMP and addenda.

Two states have not implemented Jonah crab regulations. New York has not implemented the full suite of management measures. They do currently prohibit the harvest of egg bearing females, and they have their recreational harvest limit of 50 crabs. The other provisions are expected in early 2018.

Then Delaware has not yet implemented Jonah crab regulations. Delaware delayed implementation in anticipation of changes to the lobster regulations through Addendum XXV. This is given the small size of their lobster and Jonah crab fishery, as well as it's a costly process. Now that we are not moving forward with Addendum XXV, Delaware has started the Jonah crab regulation process, and those are expected in 2018.

For de minimis status states qualify, if for the three preceding years their average commercial landings constitute less than 1 percent of that average coastwide commercial catch. Delaware, Maryland, and Virginia apply and meet the de minimis requirement. PRT recommends approving de minimis status for those three states.

The PRT recommends the TC discuss standard methods for reporting survey data. This includes a common unit of measure; as well as a standard definition of young of year. The PRT highlights the importance of all states implementing that 4.75 inch minimum carapace width; and the PRT recommends continued research so that a coastwide stock assessment can be completed in the future. With that I will take any questions.

CHAIRMAN BORDEN: Are there any questions for Megan? No hands up. Mark Alexander, I understand you want to make a motion.

MR. ALEXANDER: Where did you get that idea? Yes I would like to make a motion to amend just to add Connecticut to the list of de minimis states.

CHAIRMAN BORDEN: Mark, just the motion. You don't have to amend anything. It's not on the board.

MR. ALEXANDER: Okay.

CHAIRMAN BORDEN: You just make your motion and include Connecticut.

MR. ALEXANDER: I will make this motion here. I move to approve the 2017 Jonah Crab FMP Review State Compliance Reports, and de minimis status for Connecticut, Delaware, Maryland, and Virginia.

CHAIRMAN BORDEN: Jim Gilmore has seconded any discussion on this? Is there any objection to approving the motion by unanimous consent? **No objections; it stands approved.**

OTHER BUSINESS

CHAIRMAN BORDEN: Okay, so moving along to other business. We had two individuals that wanted to speak; I'm one of them. I'm going to take Pat Keliher. Is there anyone else that wants to? Dan, you'll go second. Okay Pat and then Dan.

MR. KELIHER: This Board and this Commission would be remiss if we did not recognize Terry Stockwell; and his retirement from the Maine Department of Marine Resources. Terry, sitting there all alone at the end of the table, outstanding in his field, has served the Department of Marine Resources as the External Affairs Director since 2005, and also as my designee to the New England Fisheries Management Council since 2006.

He was hired as a Resource Management Coordinator, working on lobsters, as well as whale issues with the Atlantic Large Whale Take Reduction Team and the Harbor Porpoise Team as well. Terry served as Chair of many committees on the Council, as well as the Commission, and actually served as the Vice-Chair and Chair of the New England Fisheries Management Council.

Terry is well respected around this table, and within commercial fisheries up and down the coast within New England. Frankly, he's been a mentor to me; even as a member of my staff. I learned a tremendous amount from Terry; and I could turn him loose to come to these meetings without feeling like I had to worry about the direction that he was going to be moving the state of Maine in.

He certainly has been missed. Every time I go to a New England Council meeting I miss him greatly. But he certainly has been missed in my office; and I want to recognize him here today. I know the Executive Director has a little token of the Commission's appreciation. Terry, to avoid you having to carry something back to the state of Maine, I also have something in my office for you as well. It's not brown liquid, but it will hang on the wall and look good.

MR. TERRY STOCKWELL: That's a ploy to get me to come to Augusta.

CHAIRMAN BORDEN: Bob.

EXECUTIVE DIRECTOR ROBERT E. BEAL: I don't have a lot to add to what Pat said, from the Commission perspective, other than a big thank you for Terry for all the years of serving as proxy for George Lapointe before Pat Keliher and Pat over the 11 years. I think you have at least a total 11 years here sitting around this table. On behalf of the Commission thank you for that. I've got a Commissioner pin that I will bring down to you, and a letter of recognition of your service on behalf of all the Commissioners, so thank you, Terry. (Applause)

CHAIRMAN BORDEN: Terry, do you want to say anything?

MR. STOCKWELL: Yes, thank you Mr. Chairman, I will be brief, because I don't want to stand in the way of everyone getting lunch. But it's with mixed emotions that I'm back here solely with one hat on. I've enjoyed working for the state of Maine, and working with all of you in this process, and many of you in both the New England and Mid-Atlantic Fishery Management Councils. With my sole hat on as a Council representative, I look forward to coming to these meetings again and continuing our collaborations and friendships, so thank you very much, Pat and Bob and the rest of the Commission family.

CHAIRMAN BORDEN: Thanks, Terry. Dan.

MR. MCKIERNAN: As I mentioned earlier, I would like to have the Board consider adding to the Annual Plan Review Team summaries of the status of the fishery some effort statistics, specifically number of active permits, number of traps fished, and number of trap hauls that states could submit. Right now Section 2.1 in the Plan Review talks about the commercial fishery status, but only landings are included.

I think it would be appropriate, in light of today's presentation from Maine that they now have a good handle and good statistical precision for some of these estimates, to bring those forward. I do that because I think it's important when you think about the weighted issues such as the herring fishery, the menhaden fishery, and the whale issues. I think it's necessary that we get a better handle on the performance of the fishery in its totality.

CHAIRMAN BORDEN: Comments on that suggestion, any objections? No objections so we'll do it. Does anyone else want to speak before I give you my concluding remarks? I think this is my last meeting; I would point out as the Chair. I have served for two years. I would just like to say that it has been really delightful to serve as the Chair.

There have been a few times where I probably would have preferred being someplace else; but that goes with the turf. I think the Board, in my own view, has done a tremendous amount of work over the last two years. I would just like to just quickly summarize this. In terms of the Technical Committee and the PDT, they've produced no less than seven really first class documents on the status of the stock; and done analyses that have never been done before.

I think it was extraordinarily useful. They should be absolutely commended, and I hope Kathleen takes that message back to them. I'm sure there have been a whole host of hours where they've said, why are we doing this work, they don't pay any attention to all our suggestions? Well, we have paid attention to some of their suggestions; but not all.

I would note that in the past two years we completed a new stock assessment; and we're well on the way to doing another one. We adopted the first Jonah crab FMP; we've already amended it twice. If you look at the landings, the way the landings have gone up, we could not have acted in a more responsible manner.

We previously had been fully engaged with the coral process and the Monument process; and finally, I would note that we have two addendums that are in progress already, a data collection addendum, Addendum XXVI, and then the Gulf of Maine/Georges Bank Addendum to try to add resiliency to the stock. Both of those are extraordinarily important actions for the Board.

What I anticipate going forward is that you're going to have to keep up the pace. In terms of keeping up the pace, you're going to have to look at the next meeting, you're going to have to deal with the terms of reference for the next stock assessment; and we'll need to continue to review those as needed. We'll need to finalize in the next couple of years Addendum XXVI and XXVII; possibly work on corals some more, and

the Monument issue. Finally, given the discussion on whales, I anticipate that there is going to be some necessity for us to get engaged in activities to reduce vertical lines in the water, and address some of those concerns. My complements to all of you, I would particularly like to single out Megan, for all the work that she's done. The staff has really gone a great job, applause to Megan. (Applause)

ADJOURNMENT

CHAIRMAN BORDEN: Is there any other business to come before the Board? No other business, the meeting is adjourned.

(Whereupon the meeting adjourned at 12:25 o'clock p.m. on October 16, 2017)