

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

**Webinar  
August 2, 2021**

**Approved October 18, 2021**

Proceedings of the American Lobster Management Board  
August 2021

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1. **Approval of agenda** by consent (Page 1).
2. **Approval of proceedings from May 3, 2021** by consent (Page 1).
3. **Move to initiate an addendum to implementing electronic tracking for federally permitted vessels in the lobster and Jonah crab fishery, with the goal of collecting high resolution spatial and temporal effort data. This tracking data shall be collected under the authority of the Atlantic Coastal Fishery Cooperative Management Act. The PDT should use the Work Group report on vessel tracking as guidance when developing options and system characteristics** (Page 18). Motion by Eric Reid; second by Cheri Patterson. Motion carried (Page 19).
4. **Move to initiate a stock assessment for Jonah crab to be completed in 2023** (Page 23). Motion by Ray Kane; second by David Borden. Motion carried (Page 23).
5. **Move to adjourn** by consent (Page 29).

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**ATTENDANCE**

**Board Members**

Pat Keliher, ME (AA)	Maureen Davidson, NY, proxy for J. Gilmore (AA)
Sen. David Miramant, ME (LA)	Emerson Hasbrouck, NY (GA)
Cherie Patterson, NH (AA)	John McMurray, NY, proxy for Sen. Kaminsky (LA)
Ritchie White, NH (GA)	Joe Cimino, NJ (AA)
Dennis Abbott, NH, proxy for Sen. Watters (LA)	Tom Fote, NJ (GA)
Dan McKiernan, MA (AA)	Adam Nowalsky, NJ, proxy for Sen. Houghtaling (LA)
Raymond Kane, MA (GA)	John Clark, DE, proxy for D. Saveikis (AA)
Sarah Ferrara, MA, proxy for Rep. Peake (LA)	Roy Miller, DE (GA)
Jason McNamee, RI (AA)	Craig Pugh, DE, proxy for Rep. Carson (LA)
David Borden, RI (GA)	Mike Luisi, MD, proxy for B. Anderson (AA)
Eric Reid, RI, proxy for Sen. Sosnowski (LA)	David Sikorski, MD, proxy for Del. Stein (LA)
Colleen Bouffard, CT, proxy for J. Davis (AA)	Pat Geer, VA, proxy for S. Bowman (LA)
Bill Hyatt, CT (GA)	Allison Murphy, NMFS

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

**Ex-Officio Members**

Kathleen Reardon, Technical Committee Chair	Derek Perry, Jonah Crab TC Chair
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**Staff**

Robert Beal	Jeff Kipp
Toni Kerns	Dustin Colson Leaning
Maya Drzewicki	Kirby Rootes-Murdy
Tina Berger	Sarah Murray
Kristen Anstead	Joe Myers
Pat Campfield	Mike Rinaldi
Lisa Carty	Julie Defilippi Simpson
Emilie Franke	Caitlin Starks
Lisa Havel	Deke Tompkins
Chris Jacobs	Geoff White

**Guests**

Karen Abrams, NOAA	Erika Burgess, FL FWC
Jennifer Anderson, NOAA	Colleen Coogan, NOAA
Bill Anderson, MD (AA)	Heather Corbett, NJ DEP
Nicholas Buchan, MA DMF	Peter Benoit, Ofc. Sen. King (ME)
Mel Bell, SC DENR	David Bethoney, CFR Foundation
Catherine Becker, FL FWC	Karen Bradbury, Ofc. Sen. Whitehouse (RI)
Peter Clarke, NJ DEP	Alicia Brown, NH FGD
Chris Batsavage, NC DENR	Clare Crowley, FL FWC
Jeff Brust, NJ DEP	Jessica Daher, NJ DEP

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**Guests (continued)**

Justin Davis, CT (AA)	Scott Olszewski, RI DRM
Bill Devoe, ME DMR	Noah Oppenheim, Homarus Strategies
Steve Doctor, MD DNR	Will Poston, SGA
Laura Engleby, NOAA	Jessica Powell, NOAA
Lynn Fegley, MD DNR	Chad Power, NJ DEP
Marianne Ferguson, NOAA	Tracy Pugh, MA DMF
Joe Fessenden, Am. Comm. Fishing	Story Reed, MA DMF
Crystal Franco, NOAA	Renee Reilly, NJ DEP
Erica Fuller, Earth Justice	Jason Rock, NC DENR
Shaun Gehan, Gehan Law	Samantha Russo, FL FWC
Melanie Griffin, MA DMF	Scott Schaffer, MA DMF
Jon Hare, NOAA	Burton Shank, NOAA
Hannah Hart, FL FWC	Kara Shervanick, NOAA
Marin Hawk, MSC	Krista Shipley, FL FWC
Doug Haymans, GA (AA)	Melissa Smith, ME DMR
Heidi Henninger, Offshore Lobster	Somers Smott, VMRC
Jay Hermsen, NOAA	Rene St. Amand CT DEP
Helen Takade-Heumacher, EDF	David Stormer, DE DFW
Haley Kohler, Vineyard Wind	Marisa Trego, NOAA
Rob LaFrance, Quinnipiac Univ	Corinne Truesdale, RI DEM
Wilson Laney	Jesica Waller, ME DMR
Lauren Latchford, NOAA	Megan Ware, ME DMR
Chip Lynch, NOAA	Anna Webb, MA DMF
Shanna Madsen, VMRC	Craig Weedon, MD DNR
Kim McKown, NYS DEC	Kelly Whitmore, MA DMF
Conor McManus, RI DEM	Chris Wright, NOAA
Nichola Meserve, MA DMF	Renee Zobel, NH FGD
Kennedy Neill, Yorktown, VA	Barb Zoodsma, NOAA
Jeffrey Nichols, ME DMR	Chao Zou, NOAA

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The American Lobster Management Board of the Atlantic States Marine Fisheries Commission convened via webinar; Monday, August 2, 2021, and was called to order at 1:30 p.m. by Chair Daniel McKiernan.

**CALL TO ORDER**

CHAIR DANIEL MCKIERNAN: Welcome everyone to the August 2, 2021 American Lobster Management Board meeting. My name is Daniel McKiernan; I'm the Administrative Commissioner from Massachusetts.

**APPROVAL OF AGENDA**

CHAIR MCKIERNAN: First on the agenda is approval of the agenda itself. Are there any objections to the agenda, or any additions or modifications anyone wants to make? Raise your hand if you do.

MS. TONI KERNS: I don't see any hands, Dan.

CHAIR MCKIERNAN: Right, seeing none, it's approved by unanimous consent.

**APPROVAL OF PROCEEDINGS**

CHAIR MCKIERNAN: Next on the agenda is approval of the proceedings from the May, 2021 Board meeting. Are there any additions or modifications that are requested to the proceedings? Please, raise your hand.

MS. KERNS: I don't see any hands, Dan.

CHAIR MCKIERNAN: That's great, thank you, Toni, therefore, I declare it's approved by unanimous consent.

**PUBLIC COMMENT**

CHAIR MCKIERNAN: Next, Public Comment. On the agenda is a ten-minute time period for the public to communicate to the Board on any items that are not on the agenda. Is there anyone who has enlisted in advance to comment, or anyone who has got their hand raised, Toni?

MS. KERNS: I'm not aware of anyone asking in advance, and I currently don't see anybody with their hand up.

**PROGRESS REPORT ON DEVELOPMENT OF  
DRAFT ADDENDUM XXVII ON THE  
GULF OF MAINE/GEORGES BANK RESILIENCY**

CHAIR MCKIERNAN: Great, okay we'll move right into Item Number 4, which is the Progress Report on Development of Draft Addendum XXVII on the Gulf of Maine/Georges Bank Resiliency issue. The Board will recall this was first initiated in 2017, to increase the resiliency of this particular stock.

We did back burner this, due to the prioritization of the Large Whale Take Reduction Team rules that have been facing the state and federal governments. The Board reinitiated the draft addendum in February, and the PDT and the TC have been meeting numerous times. Today the PDT is seeking guidance from the Board, with the intention of providing a draft addendum for public comment coming back to the Board in October, at our next meeting. Caitlin Starks has a presentation, so Caitlin, I'll turn it over to you.

MS. KERNS: Caitlin, before you start, if I could just make sure the Board is aware that the way Dan and I are going to do hands raised is, I'll monitor the hands as I see hands go up during questions or comment periods. I'll read off the three hands in a row, about who is going to go, and then the folks that are on deck, just to keep track of the hands. Thanks.

CHAIR MCKIERNAN: Thank you, Toni.

MS. CAITLIN STARKS: Thanks, Toni. Thanks, Mr. Chair, for the introduction to this topic. You actually covered my first couple of slides, so that makes things a lot easier for me. Throughout the presentation I'll give some quick background, skipping over some things that Dan already covered, an updated action timeline, some updated technical considerations that have been discussed by the TC and the PDT.

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Then I'll go over the draft recommendations for options that the PDT has developed up to this point, regarding the management options for the Addendum. Then I have a few areas where we're looking for Board guidance and next steps for the document. This is a very brief context that Dan essentially already covered.

I can mostly skip it, but the highlights are that this was originally initiated in August, 2017, based on our report from the Gulf of Maine/Georges Bank Subcommittee that emphasized concerns about decreasing trends in Maine's Larval Settlement Survey over recent years that might foreshadow future declines in recruitment in landings. The Board initiated this Addendum to increase resiliency of the Gulf of Maine and Georges Bank stock, by considering standard management measures for the stock.

Then after it was stalled for a few years, and reinitiated in February, the Board motion that was made in February changed the focus of the Addendum a bit, by specifying that the action should focus on a trigger mechanism, such that upon reaching a trigger, measures would be automatically implemented to improve the biological resiliency of the Gulf of Maine and Georges Bank stock.

That is what the PDT and TC have been focused on since February. They've met several times. They met before the May meeting, where they presented the draft structure of options to the Board, and received some additional guidance. That Board guidance at the time was that the action should prioritize increasing resiliency of the stock over standardizing measures.

That it should consider a tiered approach with multiple trigger levels, and that it should include some relatively conservative trigger levels, such that a change to measures would occur before abundance falls significantly from current levels. Since that May meeting, the PDT and TC have continued meeting to work on analyses to inform the draft options for the document.

However, due to some of our Technical Committee members competing workloads on other high priority projects, we did have some challenges with completing the analyses that are needed to fully flush out the proposed management options before this meeting. That leads me to the updated timeline for the action. I just covered the first four rows on the table here, so now we're at the fifth row, looking at the Board receiving a progress update on the Addendum today, and then following today's meeting the plan is for the PDT to finalize the draft addendum document for public comment, with the TC analysis and recommendations that will be completed in the near future. That would set us up for the Board to consider the draft addendum for public comment in October.

Then if that draft addendum is approved for public comment, hearings would be able to take place in November and December, and the Board could meet to consider the Addendum for final approval in February, 2022. Now I'll switch gears, and go over some of the Technical Committee work that is in progress to provide advice to the PDT on the various components of the Addendum, including indices for establishing triggers, trigger levels, and management measures that are expected to increase biological resiliency of the stock.

It should be noted again that some of these analyses are not quite complete, so nothing presented today should be considered final. But on the topic of indices that could be used to establish the trigger mechanism for the Addendum, the Technical Committee has recommended using the abundance indices that will be updated as part of the annual data update process.

These include a combined index for the Maine and New Hampshire Trawl Survey and the Massachusetts Trawl Survey, with separate indices for the spring and the fall survey. Then third, the Ventless Trap Survey Index. The Technical Committee advised that the indices should be constrained to the survey provided strata, and they should focus on the pre-recruit sizes, which are 71 to 80 millimeters, and sexes should be aggregated.

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The focus on those sublegal sizes is recommended as a way to estimate future abundance trends for the spawning stock. This approach was also supported by correlation analysis from the stock assessment that shows there is a relationship between the trawl indices and the model abundance from the assessment.

For trigger levels, the TC agreed that the proposed trigger levels should be related to the assessment model output and the abundance reference points that were adopted by the Board. The reference points that have been discussed for relating to triggers are the fishery industry target, which is the 25th percentile of the high abundance regime, the modeled abundance level at the time when the abundance regime shifted from the moderate to high regime, and the abundance limit.

A trigger level approximating the fishery industry target would be the most conservative, where the trigger level that is approximating the abundance limit, which is again the points below which the stock status would be considered depleted, would be the least conservative, and really taking action at that time would be more reactive to poor stock conditions than it would be proactive.

The proposal that the TC has put together for the triggers is that each trigger point could be defined as a certain amount of observed decline in the indices that would approximate a certain change in abundance. For example, management would be triggered if the three-year moving median of the indices were to fall by a certain percentage from the reference value. The Technical Committee recommends using a running median, as opposed to an average, to smooth out annual variation, but also to better identify declining trends, as opposed to the average method. I'll try to better explain this in the next few slides, but just remember that the TC is still working out some of the details on this so the approach is not final yet. This is a visual for the reference points from the stock assessment, to remind

you all of where they fall in the Gulf of Maine/Georges Bank model abundance curve.

The highest horizontal dotted line represents the fishery industry target. Below that there is a dashed blue line that represents the point where the abundance regime shift occurs from the moderate abundance regime to the high abundance regime. Below that the dashed red line is the abundance limit, and the solid red line at the bottom is the abundance threshold.

The black dot, again on the upper right, represents the average abundance from 2016 to 2018, which is what was used to make the stock status determination for the assessment. That's what the TC is proposing as the reference level to compare the triggers to. These are the percent declines from our reference abundance value, which is that black dot, or the average abundance from 2016 to 2018 to each of the trigger levels that are being considered at this point.

From that 2016 to 2018 average abundance to the fishery industry target reference point, that would be a 17 percent decline in abundance, to the point where the moderate to high regime shift takes place would be a 32 percent decline. Then to the point the 75th percentile of the moderate abundance regime, that would be a 45 percent decline, and all the way to the abundance limit would be a 51 percent decline.

Those are the trigger levels that are being considered. Remember that these would be based on annual indices, rather than the model of abundance, but the TC does feel that it's appropriate to use a one-to-one comparison for changes in the annual abundance indices, to approximate changes in that model of abundance, based on the correlation analysis that was performed.

Then here is what those trigger levels look like as declines in abundance, just so you can get an idea of how these things are connected here. Over on the top right you're looking at the declining black lines from the black dot. You see the dotted line is

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the cumulative decline to the fishery industry target, the dash line is the cumulative decline to the abundance level, where the shift occurred from moderate to high abundance regime.

The dot dash line then is the cumulative decline to the 75th percentile of the moderate abundance regime, and the solid line is the cumulative decline to the abundance limit. The TC has also discussed the types of management measures that would be most appropriate for increasing biological resiliency, and they generally agree that increasing minimum gauge size is expected to have the most positive impact to stock resiliency, by allowing more individuals in the population to reproduce, and that is even if the gauge change is relatively small.

They've noted that increasing the minimum size would likely have a short-term impact of decreasing the number of lobsters landed, but it ultimately is expected to increase the total weight of landings. They've also noted that vent size changes should be made consistent with those changes in minimum gauge size. For maximum gauge size, the TC has said that decreasing it has the potential to increase stock resiliency by making large lobsters unavailable to the fishery. But the effects of that are less certain, due to less data. They noted that also minor changes to maximum gauge size are less likely to have a big impact, compared to changes to minimum gauge size, and that's because inshore where most of the landings are coming from, the size structure of the population is already truncated, so few large individuals are being caught.

The Technical Committee is still working on finalizing some of these analyses to better predict how certain gauge size changes would impact the stock in areas in the fishery, and in particular they are incorporating new data for Area 3 since the last time they did this analysis. One concern or issue that came up during the PDT discussions on trigger levels and potential management measures, is that there was some

disagreement among PDT members about the appropriateness of an approach.

It's a tiered approach, where you have multiple triggers that would be established, and a more conservative trigger would result in only slightly more restrictive measures compared to our current measures, and a less conservative trigger would result in relatively more restrictive measures than the current measures.

The argument from some PDT members was that given the existing uncertainties about the stock recruit relationship, that there is not necessarily a strong scientific rationale for an approach like this. But other PDT members felt that it makes sense to have a smaller change to management occur sooner rather than later, and then have a second trigger in place so that further restrictions can be implemented if things were to continue declining.

This is something that might require more discussion among the TC and PDT, but they have highlighted it as something they would like to discuss with the Board. Before I jump into PDT recommendations, we want to go over where we are with current management measures. This table shows the area-specific measures for Gulf of Maine and Georges Bank, and I think the main things to note here are the differences between areas for minimum gauge size and vent sizes, V-notch requirements and definitions, and maximum gauge sizes.

Then also, the difference within the Outer Cape Cod Area for state versus federal waters. Those are things that this Addendum may address. This is a chart that compares those minimum and maximum gauge sizes for the areas within the stock. We have the yellow slots showing where each area currently falls.

As you can see, Area 1 has the smallest minimum gauge size at 3 and  $\frac{1}{4}$  of an inch, and Outer Cape Cod is at 3 and  $\frac{3}{8}$  of an inch, and Area 3 is at 3 and  $\frac{17}{32}$  of an inch. Area 1 also has the smallest maximum gauge size at 5 inches, whereas Outer Cape Cod and Area 3 are more similar on their

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maximum size at 6 and  $\frac{3}{4}$  of an inch for federal waters, but no limit in state waters of Outer Cape Cod.

Also, on this chart there is an orange horizontal line in the middle, and that is representing the estimated size at 50 percent maturity for the Gulf of Maine and Georges Bank stock, which is 87 millimeters carapace length. There is some variation within different areas of the overall stock unit, but as you can see, minimum gauge size for Area 1 and Outer Cape Cod both fall below that stock-wide size at 50 percent maturity, which suggests that there is growth overfishing occurring, and the Technical Committee has generally agreed that it's better for the stock resiliency to move the minimum size to the at or above that 5 at 50 percent maturity of the area where the fishing is occurring.

As I mentioned, the Technical Committee hasn't provided final analyses on the impacts of gauge size changes, but the PDT does want to get feedback from the Board on whether for each area, are there any gauge sizes that are complete nonstarters that the Board would be unwilling to consider? Just keep that in mind as we go through the other options from the PDT.

Now on to the PDT recommendations. As I mentioned, they are still waiting on Technical Committee analyses to fill in some details. Generally, the PDT has just been focusing on structuring the management options in the Addendum to meet the objectives of the action, and make sure that it's accessible for the public and the Board.

Since the last meeting the PDT has changed the draft structure of options, to group them into four separate issues. The first issue would address the standardization of some measures, such as inconsistencies within LCMA's at final approval of the Addendum. The second issue would address the trigger mechanism, and include trigger level options.

The third issue would address the management measures that would be implemented as a result of hitting the triggers established under Issue 2. Then the fourth issue would be to address a spatial implementation of those measures within Area 3. For Issue 1, these are the proposed options as currently drafted.

Option 1, as always, is status quo, and that is that no changes to measures would occur upon final approval of this addendum. Option 2 is that some standardized measures would be implemented upon final approval of the Addendum, and the additional sub-options would define which measures those would be.

The sub-options to note are not mutually exclusive, so the Board could select more than one. Sub-option 2A is that upon final approval of the Addendum, measures within each LCMA would be standardized to the most conservative measure, where there are inconsistencies in measures for state and federal waters within the stock.

This would result in Outer Cape Cod's maximum gauge being standardized to 6 and  $\frac{3}{4}$  of an inch for both state and federal waters, and the V-notch definition and requirement being standardized to  $\frac{1}{8}$  of an inch, with or without setal hairs. Option 2B is to implement a standard V-notch requirement across all LCMA's in the stock upon final approval of the Addendum, and that would result in mandatory V-notching for all eggery in LCMA 1, 3, and Outer Cape Cod.

Then Sub-option 2C is to standardize regulations across LCMA's in the stock for issuing trap tags for trap losses upon final approval of the Addendum, and that would result in no issuance of trap tags before trap losses occur. Issue 2 again considers establishing a trigger mechanism to automatically implement measures to improve biological resiliency. As I mentioned before, the PDT has been discussing several options for triggers. The first is status quo, which would be no trigger mechanism at all, so no management triggered by something really just the indices, and then the trigger levels alternative options are ranging from 17 percent

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decline in the indices to 51 percent decline in the indices. It should be noted that for this issue, the intent is that the Board could select either one trigger only, or select two triggers and use a tier approach.

Issue 3 is considering what management measures would be put in place when each trigger is hit. This is where the PDT has yet to fill in those exact measures based on the Technical Committee analysis, but this is the general structure that they recommended for these options. The PDT wanted two sets of options, one that would consider LCMA specific measures, and one that would consider standardized measures.

But, given the Board's guidance to prioritize resiliency, any measures considered under either category would have to be projected to increase biological resiliency of the stock. For Option 1, we have sub-options to establish LCMA specific minimum gauge and vent sizes, and maximum gauge sizes for each area to increase resiliency.

Those are the nonstandard options. Then under Option 2, there would be two options for standard minimum sizes across the LCMAs, and those can be tied to either one or two triggers established under Trigger 2, or Issue 2. Then there are a few more options here, so next under Option 3 there would be two additional options for standardizing the maximum gauge sizes across LCMAs, and again those would be tied to either one or two triggers, depending on what's chosen under Issue 2.

Then lastly under this issue, Option 4 is, that in addition to the gauge and vent sizes that would be implemented by each trigger, the Board could also choose to trigger any of the measures that were considered, but not selected under Issue 1. As a reminder, those are things like the standard sizes within LCMAs, V-notch requirements, and trap tag loss regulations.

Then this is our last issue, Issue 4, which is addressing where in Area 3 the management measures triggered by the Addendum would apply. Option 1 is status quo, which means that Area 3 would be treated all as one unit, so the rules would apply throughout Area 3. Option 2 is that the measures would only apply in the part of Area 3 that is considered to be a part of the Gulf of Maine and Georges Bank stock.

Specifically, that means that Area 3 would be split along the 70-degree west longitude line, to create an eastern section and a western section of Area 3, with an overlap of 30 minutes on either side of that line. Under this option the idea is that LCMA 3 harvesters could choose to fish exclusively in either the western or the eastern portion of the area, and they would be allowed to fish annually in the overlap zone without needing to change their area declaration.

Then in that overlap zone they would be held to the management measures of whichever sub area they had declared. That gets us through all of the proposed options to this point, and now I just want to put up a few questions that the PDT has raised for the Board to think about today. First, given that there is some disagreement or concerns with the tiered approach to management triggers and measures, due to uncertainties about the stock recruit relationship. Does the Board want to weigh in further on whether you want to pursue that approach? Second, is there a desire to remove any of the proposed trigger levels from consideration, either because they are too proactive or not precautionary enough? Then third, considering the range of possible minimum and maximum gauge sizes, are there limitations to the options that the Board would be willing to consider? Finally, a question came up about the process for implementing changes to measures when a trigger is hit.

The question is, if a trigger mechanism is implemented through the final approval of the Addendum, would the states be able to write that trigger rule into their rulemaking, or would new rulemaking to implement new measures have to

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occur only after that trigger is met? This is just to get a better sense of the expected timelines for evaluating a trigger and then implementing new management measures as a result.

This is my last slide, which is just reviewing the next steps. After this meeting the TC will finalize their analyses to inform the management options. Then in August and September the PDT will be meeting to consider those analyses, and recommend final options for the document.

At this stage I expect to invite those members of the Board who had volunteered in May, to sit in on the PDT meetings and offer some guidance on the document. Then following finalizing the document, we expect it will be presented at the October meeting for the Board to consider it for public comment. That is all I've got, so I'm happy to take any questions, Mr. Chair.

CHAIR MCKIERNAN: Thank you, Caitlin. I think you've gone over a lot of pretty nuanced detail here, and I'm wondering if there are any questions about the presentation before we get into any of the substantive discussion. I actually have one myself, and it has to do with the slide, Issue 1 options.

In that slide it mentions under 2A, referring to this would result in Outer Cape Cod maximum gauge being standardized to 6 and  $\frac{3}{4}$  for state and federal waters. Actually, I think it's a little more complicated, because under the federal regulations the most restrictive rule applies. We have dual permitted lobstermen, who are fishing in the Outer Cape that are bound under the federal standards to comply with the more restrictive rule.

In other words, they would have a 6 and  $\frac{3}{4}$  inch minimum size in state waters, because they hold the federal permit. I don't know if you need to change that per se, but I want to make that correction so people can understand the complexity of this dual jurisdiction situation. I

would welcome any other Board members if they have any questions to Caitlin on any of these other options, to ask those now.

MS. STARKS: Dan, I just want to clarify that point, to make sure I understand. For Outer Cape Cod, the idea is to just blanket have all harvesters permitted for that area be required to meet the 6 and  $\frac{3}{4}$  inch maximum gauge is correct?

CHAIR MCKIERNAN: Well, that's certainly one outcome, but I just want it to be known that given the dual authorities in the state and federal managed fishery, that the status quo in the Outer Cape, in my view, is that those who are dually permitted already are bound by the more conservative rule when in state waters. In other words, the issue I'm taking issue with is instead of saying for state and federal waters say state and federal permit holders, because there is that issue of if you're fishing in state waters but you hold a federal permit, you are bound by those federal rules. I would let, maybe somebody from NMFS sort of reinforce that, but that's my understanding.

MS. STARKS: I think I've got you, Dan, thank you.

CHAIR MCKIERNAN: Are there any questions on the presentation? If not, I guess we could get into some of the substance.

MS. KERNS: Right now, I have David Borden.

CHAIR MCKIERNAN: Go ahead, David.

MR. DAVID V. BORDEN: Caitlin, while Dan's got this slide up. On 2A, have the technical folks looked at the impacts of that change, in terms of how it would affect the industry itself? What type of lost revenue, for instance, would be expected?

MS. STARKS: The short answer is no. We don't have analysis on that. I think it would be possible to do an analysis to show changes in catch of different sizes based on that change, but I'm not quite sure if we have the data to go as far as value. I can ask the Technical Committee what kind of analysis we can put forward for that change.

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MR. BORDEN: Okay, and then a follow up, if I may, Mr. Chairman. A follow up would be, in terms of the gauge changes. Are the technical folks looking at a particular range of increases? In other words, how much of an increment? Are we looking at a 16<sup>th</sup>, a 32<sup>nd</sup>? How is that going to be evaluated?

MS. STARKS: Sorry, I want to make sure I understand the question. Are you asking what gauge size increases are being considered?

MR. BORDEN: Yes, not the gauge size, the increment of change. How much of a change are you going to look at? I just point out that in Rhode Island I think when I worked for the Department, I think we went through 8-gauge changes during my tenure. We always did it using a 32<sup>nd</sup> of an inch, in order to minimize the economic harm to the industry. But they were sequential, in other words one came right after another. Are you going to look at that type of strategy, or are you going to look at say a more aggressive strategy, a 16<sup>th</sup> of an inch? What is the increment of change?

MS. STARKS: I guess that is something we could add options for. Right now, we were not thinking of a gradual approach being part of the option. I think generally what I have on the slide right now, this chart of maximum and minimum gauge sizes is what the TC has been analyzing. We're looking at these sets of minimum and maximum gauge sizes. If a change were implemented, I think right now we're just looking at it being implemented right away, and not necessarily a gradual increase to get to that size.

MR. BORDEN: Okay, thank you. Mr. Chairman, when you get to the point you're taking statements, I'll have a statement on that if you would like to call on me again. Thank you.

CHAIR McKIERNAN: Sure, thank you, David. Is there anyone else on the Board that wants to comment at this point?

MS. KERNS: No hands, Mr. Chair. Oh, you have Kathleen Reardon, your TC Chair.

CHAIR McKIERNAN: Go ahead, Kathleen.

MS. KATHEEN REARDON: Just to clarify, David. We're looking at 16<sup>th</sup> of an inch for these increases. It's kind of hard to tell, because of all the different fractions, but just to clarify. Right now, we are looking at 16<sup>th</sup>.

CHAIR McKIERNAN: Just for my clarification. Is that kind of a recommendation, a kind of recommendation the PDT would be expected to make, because it's a little more sort of socioeconomic, as opposed to the TC? Would that be the role of the PDT, to sort of weigh in on that? I guess that's a question for Caitlin.

MS. STARKS: Yes, Dan. I believe so. The Technical Committee will be able to provide the analysis that says, you know, at this minimum and maximum gauge size this is the expected outcome, in terms of changes for the stock, and changes in catch. But the PDT would definitely be able to recommend something like an incremental increase, or other issues that relate more to the market side or industry side of things.

CHAIR McKIERNAN: Okay, thanks. Any other discussion on this presentation from the Board?

MS. KERNS: No hands, Mr. Chair.

CHAIR McKIERNAN: At this point, Caitlin, this is an update. There is still more work being done on the back end by the two committees, the TC and the PDT. Will you feel cheated if you don't get more substantive discussion by Board members, or are you okay if we wait to see something closer to a final product?

MS. STARKS: I do have these questions up on this slide that we were hoping to get some discussion on today. In particular, I think it would be helpful to hear if there are any gauge sizes that should not be considered as options for this document. I think that is one that the PDT has struggled with.

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CHAIR McKIERNAN: It sounded like David Borden wanted to come back and talk about gauge size increments. David, are you ready to bring that up?

MS. KERNS: Mr. Chair, you have a queue of David, Pat and Jason McNamee.

CHAIR McKIERNAN: That would be David Borden, Pat and Jay.

MR. BORDEN: Okay, thank you, Mr. Chairman. My only suggestion, having gone through that in my history numerous times. Every time we get, at least I'll just talk from a Rhode Island perspective. Every time we would be confronted with the need to raise a change for scientific, biological reason or whatever.

The industry would want to know, what is the projected impact, and then there would be a discussion that would follow it, which would relate to, how do we minimize the negative consequences? As I've spoken before at previous Board meetings, this whole concept, I have some concerns about it, which I'm going to voice at some point today.

When you start having a tiered approach that is based on, and I'm just picking a number out of the air, based on a 30 percent reduction in abundance, and then you superimpose on that a 16<sup>th</sup> of an inch gauge size change. Unless the data, our experience from Rhode Island is completely wrong, then you're going to compound the negative impact on the industry.

I think the Board really needs to think through how they do that. I'm not saying don't do it, I'm saying we have to be careful that we factor in a broader range of considerations, other than just science. If we want to try to minimize the negative consequences to the industry, you're going to want to phase it in, but have a strategy where the industry knows and expects a certain set of regulations to come out of it, and you can use a phase-in strategy to achieve the same end.

You might be forced to kind of abandon, if you advocated a much more aggressive strategy up front. I think there needs to be some discussion on at least the analysis. If we're going to look at gauge changes, then I would advocate, fine, we look at a 16<sup>th</sup> if that is what the technical folks want to look at, but we also look at the consequences of a phase-in strategy like a 32<sup>nd</sup>, once a year for X number of years.

CHAIR McKIERNAN: Pat Keliher.

MR. PATRICK C. KELIHER: Caitlin has listed four questions that the PDT is asking for the Board for guidance. How do you want to handle these, one at a time or do you want me to address all the points that I have related to these questions?

CHAIR McKIERNAN: Well, this particular item is scheduled for only another ten minutes on the agenda. I don't think we have to keep exactly to the timing. But why don't you take a crack at what the concerns are that you see from the state of Maine, which is the number one lobster producer in the country. I think your input is really valuable.

MR. KELIHER: Well, I appreciate the standing you've given us. I'll just try to quickly hit on all four of these questions then, to give a little bit of thought from the state of Maine around these issues. Question Number 1, is the Board still interested in a tiered approach. I think from Maine's standpoint, we are.

We think we need to push for a tiered approach that allows for action earlier in the process, and is likely the type of action that is going to be more palatable. In other words, we don't have to be so draconian. I think we can take a lesson out of the Southern New England playbook here. If we continue to look for a single action, I think it's going to push us down the road. It's going to be harder to get to that point, and when we come to taking an action, it's going to have to be much more draconian, if we could even get to that point. I think the tiered approach is the right approach.

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The second question, does the Board wish to remove any of the proposed trigger levels, because they are either too aggressive, or the trigger may already be met. I guess all I would say to that one is, we wouldn't want to be too aggressive and implement a trigger that has already been met, right? If the PDT is going to look at triggers, let's not have something be established that would have already been met before we even finalized the Addendum.

Number 3, are there limitations to the range of gauge sizes the Board is willing to consider. From our perspective, we need to stay with the biology here. Maybe I don't see a need to consider minimum gauge sizes and then one that are greater than the size at maturity. But other than that, let's stick with the biology. Then Number 4, if a trigger mechanism is implemented through final approval, will states be able to write established triggers into the rulemaking.

I do want to point out the state of Maine's both minimum and maximum sizes are in statute, which creates some complexity. But knowing this is coming, it will be the Department's intent to submit a bill to the Legislature this fall, or this winter, excuse me, to ask either for the authority to establish these, or new gauge sizes, or ask for the gauge sizes to be changed, if they have been addressed through an FMP by the Commission. Those are my quick thoughts around those points, and I hope they were beneficial.

CHAIR McKIERNAN: Thank you, Pat. Jason McNamee.

DR. JASON McNAMEE: I think in general; I'm just going to support everything that Commissioner Keliher just said. I agree. I think the idea here would be triggers was to be kind of proactive, and have a system kind of set up. I appreciated the comments about kind of learning the lesson from Southern New England, and trying to be proactive.

I think these triggers seek to implement that, and I appreciate the PDTs concern about the weak stock recruit relationship, but again, I think that type of uncertainty is exactly why we want to have a series of triggers, you know in place, so that you're not kind of waiting for potentially the stock assessment to catch up, or get you to a point where you are kind of beyond the point of being able to recover in a reasonable way.

That for me, gets at Number 2 as well, where I think the suite of triggers that you have in there seem good. I don't have any recommendation to remove any, the comment that Pat made notwithstanding. I think it would be awkward to implement something that potentially we've already triggered.

I'm not going to comment any more on Number 3, and then on Number 4, it seems like we would want to have this in perspective so that again, if the idea is to be nimble, and to be able to make some changes prior to something really bad happening in the population, which is so important to the economies of particular, Maine, but also Massachusetts, also Rhode Island. You know, I would think we would want to have these things kind of in place, so that we could use them rapidly if needed. That's it. I just wanted to weigh in on the questions as well. Thank you, Mr. Chair.

CHAIR McKIERNAN: Caitlin, is one of the fundamental questions in Number 4, how long would each state require to enact amended rules? Are those time periods sufficiently quick? Am I right in sort of summarizing it that way?

MS. STARKS: Yes, I think so, Dan. We're trying to get at, you know figuring out what the timeline is if we have the ability to evaluate whether a trigger has been hit every October, which is the plan for when those data updates would occur. Would the states be able to implement quickly enough measures to implement for the following fishing year, if they don't write these trigger rules into their rulemaking? I think that is the gist of it.

CHAIR McKIERNAN: Yes, I can say on the Massachusetts end, we have done so many quick

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rule changes in the Scup, Black Sea Bass and Fluke arena that we have a whole routine of these emergency actions justified as needing to comply with an ASMFC plan, that we could certainly enact a rule within, certainly less than five months, but we could do it in a couple of months. But it sounds like in Maine they need to extract the authority from the statute into another regulatory scheme. Is Maine the only state within the Gulf of Maine that has that challenge? What about New Hampshire and Rhode Island?

MS. KERNS: Dan, you have Cheri with her hand up.

CHAIR MCKIERNAN: Okay, go ahead, Cheri.

MS. CHERI PATTERSON: Yes, thank you, Mr. Chair. New Hampshire can react very quickly with our rulemaking, considering this is an ASMFC managed species. Under Number 4, I would prefer to write in the rulemaking the trigger process, as long as there is some, and I know that there cannot be some clear thought process that this is going to last for a long time. I would hate to continually have to change rules or triggers on an annual basis, because ASMFC is changing it.

I would prefer to just keep it set for a long period of time. I also agree with Pat and Jay on Numbers 1, 2, and 3. I think that it's important to keep this tiered approach. I think it allows us to pivot quicker, to react to the management of lobster. I think that I agree with what both Pat and Jay say for Number 2 and I don't see where Number 3, where we need further limitations to the range of gauge sizes that is being considered.

CHAIR MCKIERNAN: Okay, Toni, anyone else with their hand up?

MS. KERNS: You have Jason McNamee.

CHAIR MCKIERNAN: Great, go ahead, Jason.

DR. McNAMEE: Yes, I was just going to quickly answer the question, Mr. Chair, that you asked. I think that you asked, but in Rhode Island it wouldn't be statutory, it would be regulatory, so we could get things established in a reasonable amount of, you know it's relative, I guess, but a reasonable amount of time. It shouldn't take years, or anything like that.

CHAIR MCKIERNAN: Okay thanks, and I know that this is about resiliency of the Gulf of Maine stock, but when we're all done with the next iteration of lobster management, I hope that there will be some attempt to make some of the rules a little bit more compatible, relative to commerce.

Although this isn't one of the objectives that has been laid out, the fact that some of the Area 1 lobsters can't be easily imported, or have to be filtered out before they get to some of the Southern New England states or Mid-Atlantic states, has been a concern of mine, in terms of the effects on commerce. At some point I think we need to ask if it's worth it.

If not, can we achieve some of these conservation measures in a way that is more consistent with ease of commerce? You know, I would hate to see a commerce clause case sort of bubble up. Obviously, it's a conservation measure, but I know that it's been problematic for some dealers to be shipping lobsters to states with a slightly higher minimum size, and that is problematic. Any other comments, Toni?

MS. KERNS: David Borden.

CHAIR MCKIERNAN: Go ahead, David.

MR. BORDEN: Just general comment follow-up on what I said before. I support this, so everyone is clear. I support this concept, and I think it's incumbent upon the Board to try to do this in a manner which is clear, and kind of effective and timely. On the issue of timing, I'm a little bit concerned, and I'll express more at the next meeting, about our ability to kind of standardize

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some of the regulations, and then develop this tiered approach all in one action.

Hopefully the technical people will prove me wrong, bring forth an analysis that we can all agree with. But I think the tiered, the aspects of the tiered phase really have to be well thought through by the Board. It's going to be very complicated, I think, and there are going to be really dire implications for 10,000 fishermen up and down the coast, of how we do that.

What I would suggest is, at the next Board meeting we really focus on our ability to do this all-in-one action. I could envision a strategy where we break this into two actions, and do the first step of standardizing some of the regulations, and then in the second phase, which would quickly follow the first phase, then focus on the triggers.

You know I'm a bit concerned that some of this analysis hasn't been done, and the fact that it's only a few months away, when it's supposed to be ready to go to public hearing. I don't think that is necessarily a realistic expectation. Then, the other concern I have with it relates to my experience with Southern New England. I've said this before, so I'll be brief, but we went from the peak of landings in Southern New England, to basically a collapsed stock in four to five years. I'm sure Caitlin has got the chart that documents that, and she could put it up for the Board. But that's a really quick period of time to go from one extreme to the other extreme. We have to factor that in to our consideration of this. If we pick triggers that don't get implemented until there is a 50 percent reduction, that is the one exactly, thank you, Caitlin.

If we pick triggers that respond too late in the process, it's just not going to be an effective strategy. I think we've got to think through that really carefully, and try to look at a more gradual but phased-in approach that requires action as the stock goes down, instead of picking, say 50 percent or 30 percent decline.

I mean the stock, and Pat Keliher, please correct this if I'm wrong. From peak landings, I think we're already down 30 million pounds. How far down do we really want this to go, before we start taking actions? My recommendation is to take actions sooner. It would be better to take a whole series of small steps sooner than waiting for some major event, where you have to go do something that is so draconian, it's just going to put a whole bunch of fishermen out of business. Thank you very much, sorry to be winded.

CHAIR MCKIERNAN: Thank you, David. All right, anyone else?

MS. KERNS: Kathleen Reardon.

CHAIR MCKIERNAN: Kathleen.

MS. REARDON: A question for David. You were talking about standardization, and that is something at the previous Board meeting we were given some guidance to focus on resiliency, and so that is what we have been focusing on. But you were still talking about standardization, is that across LCMAs or within LCMAs?

CHAIR MCKIERNAN: Go ahead, David.

MR. BORDEN: Kathleen, the last portion of your question was a little bit broken up, could you repeat it, please? I apologize. I'm not sure.

MS. REARDON: It may be my internet, sorry about that. My question is, you were talking about standardization, and at the last Board meeting we were given the guidance to focus on resiliency rather than standardization across LCMAs. That is why, within the PDT process, we have had kind of different options, one being standardization across LCMAs, both Area 3 and Area 1, and then another option, which is area specific. I just wanted some clarification. Are you expecting that things are going to be only standardization, or that things could still be area specific?

MR. BORDEN: My response is I think that that is a decision we have yet to make. I don't think we

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necessarily can make it. My assumption is we're going to look at some of these analyses, and then try to make some decisions that get to that very question. My personal view at this stage, without seeing the analyses, I think there are some issues that are kind of glaring examples of how we could standardize regulations, and improve the resiliency of the stock. You know you can view that. One of the things that I kind of struggle with a little bit is, we're kind of focused on the scientific portion of it, but you can add resiliency to the stock by changing a whole host of other measures that currently are not on the table. I'm not sure I've answered your question.

CHAIR McKIERNAN: David, I think if I could weigh in. I think these measures that are being floated are those that can be flipped by a simple regulatory amendment in short order. Some of the other things that we've done in the past, like in Southern New England, where we went to a complicated effort control plan, could not be accomplished in the span of a round of rulemaking. You know it took such a long time to work out the details of those plans. I'm seeing this plan as choosing those routine lobster management measures that the input control types, you know as opposed to the output controls.

MR. BORDEN: If I might, Mr. Chairman, can I follow up on that?

CHAIR McKIERNAN: Sure, go ahead.

MR. BORDEN: I mean, I think we should stay away from gauge changes in the first phase. I think that's too complicated, and it's not that I'm trying to avoid gauge changes, it's just going to become very complicated and very contentious. I think we should focus on issues like potential changes in the V-notch definition, where you have to V-notch or not V-notch. I could see us (David stopped).

CHAIR McKIERNAN: Did we lose David?

MS. KERNS: Looks like we lost him. He's still there, but I don't hear him. David, we lost you. I'll text him to let him know.

CHAIR McKIERNAN: All right, well we do need to move on, on the agenda. Why don't we take, let's give him 30 seconds to get back, hopefully he can come back quickly?

MS. STARKS: While we're waiting for David, Mr. Chair, I think I have something to offer.

CHAIR McKIERNAN: Yes, go ahead, Caitlin.

MS. STARKS: As I mentioned, I think after this meeting we are planning to have more PDT meetings to look through the Technical Committee analysis, and I had mentioned that that would be a good time for Board members. In May we asked if there would be some subcommittee of Board members that would be interested in providing guidance on this document. I think it sounds like we'll need some additional guidance, and maybe we just have those conversations at the PDT meeting.

CHAIR McKIERNAN: I agree with that, that is a great strategy. Someone like David, who has had many, many decades of lobster fishery management experience, is an important voice in this discussion. Why don't we move on, unless there is anybody else who wants to speak to this, because I think David's concerns can be brought up at those meetings with the PDT.

MS. KERNS: I just want to check. Kathleen, is your hand raised from before?

MS. REARDON: Actually, it was just to respond a little bit to David. The conversation of other measures, like V-notches for effort control, like trap reductions. They were discussed within the Technical Committee, and we I think came to consensus that the measure that we have the most certainty on as having an impact to resiliency is gauge changes.

CHAIR McKIERNAN: Okay, that is a good clarification. David, are you back? Okay. All right, if

there are no objections. Caitlin, did you get the feedback you were seeking at this point?

MR. BORDEN: Mr. Chairman, I apologize. I'm not quite sure what is going on. I was completely muted, and I had no control over it. I also missed part of the discussion; I couldn't hear anything. Let me just make this one quick point, in terms of the whole issue of standardizing things.

I think there is a whole range of things that we can take quick action on in the first phase, they are fairly simple, easy to analyze. Depending upon what the technical folks come back to us, the PDT come back to us at the next meeting, we may want to think about separating the first phase from the second phase, because I can see the second phase being far more complicated. But we can make that decision at the next meeting, Mr. Chairman.

CHAIR McKIERNAN: Thanks, David, and I think you will be getting an invitation to attend, as a Board member, the meeting of the PDT and the TC, right, Caitlin?

MS. STARKS: Yes, that is my intention.

CHAIR McKIERNAN: Okay, all right if there are no other comments that we need at this point, let's move on, if there are no objections.

**REVIEW OF THE WORK GROUP REPORT ON  
VESSEL TRACKING DEVICES IN THE FEDERAL  
LOBSTER AND JONAH CRAB FISHERIES**

CHAIR McKIERNAN: Great, okay next is a Review of the Work Group Report on Vessel Tracking Devices in the Federal Lobster and Jonah Crab Fisheries, and Caitlin, another presentation for you.

MS. STARKS: Thank you, give me one second to get this up on the screen.

CHAIR McKIERNAN: I can editorialize in the meantime. I think this is one of the more

important issues of our time for this lobster fishery. In my own experience it's really hard to help the lobster fishery sort of be considered for the important role that it plays in the maritime economy, when it's so difficult to identify places and times of fishing.

The lobster fishery at this point is at a real disadvantage relative to its other counterparts, that being groundfish, scallops, herring, surf clams, all those other fisheries that have vessel tracking systems or vessel monitoring systems. That is my comment to begin, so go ahead, Caitlin.

MS. STARKS: All right, thank you, Mr. Chair. Today for some context, at the Lobster Board meeting in May the Board expressed continued support for implementing vessel tracking requirements for federally permitted lobster and Jonah crab vessels. This has been a continuing discussion for the Board over the course of several years, with the Board highlighting the need for high resolution spatial and temporal data from vessel tracking, particularly for federal waters, to address several challenges that the lobster fishery is facing. At that May meeting the Board agreed to form a work group, which included representatives from the Board, federal and state management agencies, and law enforcement, and that group was identifying objectives, technological solutions and just some characteristics for implementing vessel tracking requirements in the federal lobster and Jonah crab fisheries.

That work group, as well as technical staff who have been working with the tracking technology and data systems have met several times over the last few months, and they've put together information on the objectives of requiring harvesters to collect tracking data, and identified some of the essential device characteristics for those trackers.

Based on the Board's previous discussions and intentions for a tracking program, the work group developed this proposed objective statement, which is that the objective of requiring vessel tracking devices for federally permitted vessels, and just to be clear that includes vessels with both

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federal and state permits as well, for lobster and Jonah crab, is to collect high resolution spatial and temporal data to characterize effort in the federal American lobster and Jonah crab fisheries for management and enforcement needs.

Noting that these data will improve the stock assessment, inform management decisions related to protected species, and enhance offshore enforcement. To go over a bit more detail again on each of these aspects. First is acknowledge that improved spatial resolution of harvest data will improve the size composition data that is used in the stock assessment models, which will ultimately allow for better estimates of exploitation and reference abundance.

Second, the current model is being used to assess the location of vertical lines in the fishery, and their associated risk to right whales could be significantly improved with high resolution vessel tracking data. The recently published biological opinion includes additional risk reductions for the U.S. lobster fishery, starting in 2025, so there is a pressing need to get these data and models updated with better information before that time, to determine if additional reductions were needed.

Third, there is a need to record the footprint of the U.S. lobster fishery, so that information can be considered as part of ongoing and future spatial allocations discussions that result from new, emerging ocean uses, such as aquaculture, marine protected areas, and offshore energy development.

President Biden's 2021 January Executive Order included a goal of protecting 30 percent of U.S. waters by 2030, and that is just one indication that these types of conversations are definitely on the horizon. Lastly, there is the enforcement challenge of locating broadly dispersed gear in the offshore areas. Vessel tracking should definitely benefit the efficiency and efficacy of

enforcement, by providing locations of type gear to enforcement officials.

Out of the work group discussions the recommendation was developed that the Board should initiate an addendum to consider implementing electronic tracking requirements for federally permitted vessels in the lobster and Jonah crab fishery, and this is based on the understanding that this would allow tracking data collection to be implemented under the authority of the Atlantic Coastal Fishery Cooperative Management Act, ACFCMA, which will provide the process and flexibility that we need for collecting information and sharing that data, in order to achieve the objectives that we've identified.

Additionally, operating under ACFCMA would allow the tracking data to be stored directly to ACCSP, and that will make data access easier for state fishery management agencies and law enforcement. The work group also made several recommendations on specifications that should be considered for the tracking devices that would be required if the program were implemented.

First, the trackers should report location data at a rate of one ping per minute for at least 90 percent of the fishing trip, and based on pilot project results, our understanding is that with this rate we would be able to distinguish lobster fishing activity from transiting activity, and also calculate the number of traps per trawl.

Second, the work group noted that cellular tracking devices are the preferred technology over satellite systems, due to lower cost and that they are generally simpler to install and use than satellite-based technology. The working group also emphasized that devices should be required to meet some minimum standards, and those should be defined by ACCSP and its partners, to ensure that data needs are consistently met, while still allowing flexibility for technology to be able to evolve and improve over time.

Some examples of these requirements are that they should have power systems capable of running the

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device at the specified ping rate for the entire fishing trip. They should meet minimum precision and accuracy requirements, and they should be capable of making a distinction between a tracker unit and a vessel permit or vessel or permit, so that the data coming from a particular tracker at a particular time can be tied to a vessel or a permit, rather than the tracker itself.

Some additional considerations that the work group brought up were first, that there are several issues where they felt consulting the Law Enforcement Committee would be useful. For example, they would like the LEC to weigh in on when tracking devices would need to remain active. What rate or capabilities they should have for a dockside communication, and what tamper proof feature should be required, such as affixing devices to the vessels.

The work group also noted that the Addendum will need to consider how tracking requirements should be applied to the mobile gear fleet, as opposed to pot trap vessels, since these different gear types could require different recording rates. They also said that technical staff from the states and ACCSP should draft the standards and processes for data reporting, management, and dissemination of vessel tracked data collected under the proposed requirements, and lastly that the Addendum should address a process for how devices would be approved for use in the fishery.

Beyond those considerations the working group members also noted some questions that will need to be answered as this process moves forward, which are listed on this slide. For one, the Board is looking for, in terms of the timeline for implementation, what is the Board looking for in general? How quickly are we looking for this to be implemented, and if the Board were to initiate an action today, the Addendum could be completed by February, 2022 at the earliest. If that is the case, there is a question of how that overlaps with the timeline for the mandatory eVTR for lobster permit holders.

Additionally, we want to figure out how much lead time is needed to develop the data collection and management systems that will be needed for this program, as well as the time and resource requirements for ACCSP for things like program development and data management and program maintenance, and also need to determine the time and resources requirements from the state side, as well as who will provide tech support to harvesters for these tracking devices, and who will pay for them.

With all of that information in mind, the action for consideration today is whether the Board would like to initiate an addendum to consider implementing a requirement for electronic vessel tracking for federally permitted lobster and Jonah crab vessels. That is the end of my presentation, so I can take any questions.

CHAIR McKIERNAN: Thank you, Caitlin, are there any questions for Caitlin?

MS. KERNS: I have Pat Geer and then David Borden.

CHAIR McKIERNAN: Okay, go ahead, Pat.

MR. PAT GEER: Caitlin, I just had a question. How well will a cellular system work versus satellite, especially when you're going offshore?

MS. STARKS: My understanding is that the cellular devices would still be logging the locations in a cache, and as soon as it comes back into cellular range it would be uploading those locations. I believe that their precision accuracy is equivalent, it's just a matter of the lag between when the location is recorded and when it's uploaded.

MR. GEER: Okay, thanks.

CHAIR McKIERNAN: David Borden.

MR. BORDEN: My question is, and I don't know whether this is to Alli or staff. For purposes of the question, just assume that we do a tracking Addendum. It takes a year to do that, it takes another year to implement it, so that is two years.

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Then we make a recommendation to NOAA to implement it for permit holders in federal waters, as a trailing action. How long will it take NOAA to do that? I recognize that that is going to be dependent upon what we do in the action originally. But if Alli could provide some guidance on that it would be helpful. Then I might want to follow up with another question.

CHAIR MCKIERNAN: Alli, is it you or anyone else from the Service that would respond to those, let us know.

MS. ALLISON MURPHY: Thank you, Mr. Chair, and thank you for the question, David. I think you're totally spot on in regard to that the devil is going to be a little bit in the details, as to what the PDT develops, and how rigorous of a system they develop. I think that's really going to inform the process to implementation.

You know something really built up, like more akin to our VMS program with this type approval. I don't know if vessels are going to need to be inspected and certified for having, you know the system installed, that kind of stuff. That is going to necessitate additional time to be built into the process before any flip, before we could turn this program on.

There is that aspect. I think another really important thing here is, if this Addendum is initiated, I'm hoping that there will be a PDT or a working group developed that will consist of some of the state experts who have worked with these systems, and can potentially front load some of the analyses that we would have to do in a federal rulemaking into that Addendum.

One of the things we've talked about at the working group level is the one-minute ping rate, and potentially Maine has some analyses demonstrating why the one-minute ping rate is necessary for enforcement. That would be another thing that would kind of help facilitate things to move on a little bit more quickly.

As far as rulemaking goes. We definitely don't have the best track record with the lingering eVTR rulemaking not proceeding super-fast. But I have heard loud and clear how important this issue is to everybody at the Board, and I think I could garner some support from some folks at GARFO, and try to move this action through fairly quickly. Does that help answer your question, David?

MR. BORDEN: Yes, thank you, and Mr. Chairman, can I follow up with another question?

CHAIR MCKIERNAN: Go ahead, David.

MR. BORDEN: This is a question and also a suggestion, to try to help this situation. I mean the states have a long history of taking action on lobster in advance of federal rules. We've implemented a number of regulations. One of my questions, as everyone knows, I support this action. I've spoken repeatedly on the need to do this. I know that the industry, some members of the industry are not going to like the action.

But it's the only way that I can envision us ever being in a position to actually support the industry, given what's taking place, in terms of wind energy development, right whale rules. You know I've listed the reasons why we need to get on with this. I think one of the outstanding questions, and this doesn't need to be answered today, but I would like it answered by the Board meeting, the next Board meeting, is in consultation with Alli and Chip Lynch, and you, Mr. Chairman, and whoever else.

I would like to know whether or not the states have the ability, after they pass an Addendum, to implement. Make it a compliance requirement of the Plan for dual permit holders, and specify a timeline. Then let the NOAA process just work along behind it as a trailing action. We've done that before; it's been fairly effective. It's a way of putting a regulation in effect on a timely basis. The trick in it is that we need to be in lock step through dialogue with the National Marine Fishery Service on the various elements that Alli just mentioned. There is a coordination function that has to take place. If you would, Mr. Chairman, I would like that

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question kind of evaluated between now and the next Board meeting, and get a report from Chip Lynch and others in a knowledgeable position, where they can respond to that.

CHAIR MCKIERNAN: David, are you also kind of implying that each of our states needs to check with, like our at-home legal counsels, as to whether there would be sufficient state authority to move forward with this? Is that part of your question?

MR. BORDEN: Yes.

CHAIR MCKIERNAN: Okay. I'm not sure Chip Lynch can provide the answer for every state, because different states may come back with a different response.

MR. BORDEN: Yes, that is a good point, and I think that should be factored in to it. We need to get some guidance on this. The big issue with me on trackers is, if I could mandate and implement trackers on all dual permit holders tomorrow, I would do it, as a way of buffering the industry from all of the changes that we see coming.

I am particularly concerned about the implications of the spread of wind energy, given the experience in Southern New England. It's going to spread up into the Gulf of Maine and out on Georges, and we need to know where this fishery takes place. We need to know the spatial and temporal footprint of the fishery, so that we can document it and try to minimize the impacts on the industry.

CHAIR MCKIERNAN: Agreed. All right. Does anyone else care to comment, or even make a motion to possibly move forward with a future addendum?

MS. KERNS: You have Eric Reid with his hand up.

CHAIR MCKIERNAN: Great. Eric.

MR. ERIC REID: I don't think we need to have any more conversation. The conversation has built the rationale for a motion that I'm happy to make, and Caitlin actually has it, if you would like it.

CHAIR MCKIERNAN: Certainly, thank you.

**MR. REID: Okay. I move to initiate an addendum to implementing electronic tracking for federally permitted vessels in the lobster and Jonah crab fishery, with the goal of collecting high resolution spatial and temporal effort data. This tracking data shall be collected under the authority of the Atlantic Coastal Fishery Cooperative Management Act. The PDT should use the Work Group report on vessel tracking as guidance when developing options and system characteristics. If I get a second that would be great. I don't have any additional rationale, Mr. Chairman, I don't think it's necessary.**

CHAIR MCKIERNAN: Is there a second?

MS. KERNS: I have Cheri Patterson.

CHAIR MCKIERNAN: Okay, brilliant. Is there anyone who would like to discuss this motion in any detail, or should we just go to a vote?

MS. KERNS: Pat Keliher with his hand up.

CHAIR MCKIERNAN: Go ahead, Pat.

MR. KELIHER: Mr. Chairman, I'll just take a second. I do want just to stress the point that you made at the very beginning, as we were getting ready for the meeting, about the importance of this work. There is a lot of opposition within the industry, and I've heard it. But I am going to support this motion. I am supporting this motion, because the fact is we are being asked to stand up and advocate in many cases for this industry, without the data that we need to do it. Right whales are the perfect case in point, so I will be supporting this motion.

I do want to just make sure that the record is clear, that this motion also ensures by using the authority of the Atlantic Coast Fisheries Cooperative Management Act, that this data that will be

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collected through trackers will be confidential and protected as such, just as any other data would be. For clarity, I would like that to be reflected in the record. Thank you.

CHAIR McKIERNAN: Thank you, Pat, anyone else?

MS. KERNS: No additional hands, Mr. Chair.

CHAIR McKIERNAN: All right.

MS. KERNS: You have Alli Murphy, I apologize.

CHAIR McKIERNAN: Go ahead, Alli.

MS. MURPHY: Sorry for being slow at getting my hand up. First, I just wanted to express my sincere thanks to Caitlin and Toni for jumping in on this issue, and leading both the policy and the data focused working groups over the summer. I would also like to thank the Directors that participated, as well as your technical staff that contributed to all the progress this summer.

Obviously, we're supportive of this effort going forward. As an Addendum, and should this pass, GARFO is, me and other staff are going to continue to participate on development to be sure to get everything we need, and so that we're ready to hit the ground running, when and if the recommendation comes to us. You know we'll be looking, as said in the working group meetings, to continue to match the requirements with the objectives of the program. I think there is potentially some work on program administration and data flows, but I think if we have all of the right people in the room, we'll be able to get there. Thank you.

CHAIR McKIERNAN: Thanks, Alli, and I want to also refer back to David Borden's comments that states do have a long history of taking actions in advance of NMFS, and it often works. But when we have enacted certain things that have been incompatible with NMFS standards,

it's been extremely painful, and it's set us back substantially.

I really appreciate the conversations that we've had in this working group, to try to get the various jurisdictions all on the same page, not only in terms of the objectives, but the technology issues. It's complicated, but it is so worth it, in my view. Is there anyone else with their hand up? Otherwise, we'll go to vote on this.

MS. KERNS: No, Mr. Chairman, I don't have any additional hands. We made a small correction, so do you mind rereading it into the record please?

***CHAIR McKIERNAN: Certainly, the motion is to move to initiate an addendum to implement electronic tracking for federally permitted vessels in the lobster and Jonah crab fishery, with the goal of collecting high resolution spatial and temporal effort data. This tracking data shall be collected under the authority of the Atlantic Coast Fisheries Cooperative Management Act.***

***The PDT should use the Work Group report on vessel tracking as guidance when developing options and system characteristics.*** Motion by Mr. Reid, second by Ms. Patterson. Let's go to vote. Is there any objection to the motion that is on the board, please raise your hand?

MS. KERNS: I don't see any hands, Mr. Chair.

CHAIR McKIERNAN: Are there any abstentions?

MS. KERNS: No hands.

CHAIR McKIERNAN: **All right then, I'm going to declare it's approved by unanimous consent.** All right, we're only ten minutes behind.

**JONAH CRAB PRE-ASSESSMENT REPORT AND  
CONSIDERATION OF A STOCK ASSESSMENT**

CHAIR McKIERNAN: The next item in the agenda is Jonah Crab Pre-Assessment Report and Consideration of a Stock Assessment. Caitlin, do you kick it off and hand it over to Derek, or do we go right to Derek?

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MS. STARKS: Derek will be the presenter, and Maya, I think you should be showing the slide.

CHAIR MCKIERNAN: Maya, take it away. I guess Derek take it away, Maya is in control of the slides. Derek Perry.

MR. DEREK PERRY: My name is Derek Perry; I'm with the Massachusetts Division of Marine Fisheries, currently serving as Chair of the Jonah crab Technical Committee. Today I'll be talking about the Jonah Crab Pre-Assessment Data Workshop and Report. We'll go into a little background about how we got here, the TCs opinion that there is a need for a coastwide stock assessment, evaluation of available data sources, and potential stock assessment approaches, some research recommendations, and a recommendation on stock assessment schedule. The TC met in August, 2017, and again April, 2020, to discuss Jonah crab research and available data. They identified data limitations, but also a need for more in-depth data review, to determine the feasibility of a stock assessment.

The Board tasked the TC in August, 2020 with conducting a pre-assessment workshop, to report out potential stock assessment approaches supported by available data. This report is developed for that task. A virtual workshop was held November, 2020. We had three webinars, one in February and two in June of 2021 were conducted.

A report was developed from workshop and webinar discussions, and was included in meeting materials. There has been an increasing trend in landings for Jonah crabs, it has basically quadrupled in the last 20 or so years, as the price per pound has gone up about 100 percent. You're going to shift away from lobster to Jonah crabs in Southern New England.

It's unknown what the role of abundance has played in this increase in landings. One of the things we hope to get from an assessment is to

determine the role that abundance has played in landings, and determine that relationship between landings abundance, to identify sustainable levels. There is a need for science-based management for Jonah crabs, and advice in light of Canadian Jonah crab stock declines.

There are no assessments of U.S. Jonah crab stocks, but there have been some in Canada. It showed in Canada that there has been a decline in stocks, based on a very short time of directed landings. We also wish to promote market development. You may recall that the Jonah crab FMP was put in place in 2015, largely based on the Fisheries Improvement Project that was brought to by a grocery store chain, which was concerned about sustainability of the product, and a lack of management.

There is now management in place, but still concerns about sustainability. Next, we'll go with some data sources for life history, indices of abundance and fisheries removals. The best available life history data we have is for size-at-maturity. After the FMP went in place, we have three new studies looking at size-at-maturity. All of them show that size-at-maturity for males and females from all regions in U.S. waters are below the current minimal legal size.

There is also a fair amount of data for juvenile growth, based on studies from Rhode Island and New Hampshire. For data limitations, one of the biggest ones we have is adult growth. We can get crabs to grow and molt in captivity at juvenile sizes, but not at adult sizes. We don't know how long it takes them to molt, or how much they grow from molt.

We have some tagging's that we looked at, where crabs were at liberty for three years that did not molt. It's unknown how long these crabs live, or what the natural mortality rates are. The TC looked at 31 different surveys that encounter Jonah crabs. There are some issues with some of them limiting utility of surveys for providing indices of abundance.

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One of those was spatial coverage. Most of the fishery occurs in federal waters, whereas most of the surveys occurred in state waters. There are also some concerns about the small spatial scale of some of those surveys, some of them are just based on wind farms, they don't really have a large scale of which to determine abundance. There is also concern about time series, a private FMP in 2015, a lot of the surveys did not count Jonah crabs or take Jonah crab information, so all of them started around 2015 or thereafter.

There are also concerns about catchability. Jonah crabs will burrow in sediment, so therefore they are not really successful in trawl gear, as other species may be, below survey catch rates. What we have here is a number of surveys that we looked at. On the far left we have the surveys that we looked at. To the right of that we have a time series, whether or not they collect carapace width measurements.

Next to that column we have whether or not they collect sex information, next to that are those surveys that we don't think will be used for near-term assessment with the Ys. What we are left with is a CFRF Ventless Trap Survey, Maine/New Hampshire Trawl Survey and Mass Net Trawl Survey, New Jersey Ocean Trawl Survey and Northeast Fisheries Science Center Trawl Survey.

On the far right are the reasons why some of those surveys may not be useable for us. SS stands for small spatial domain, TS stands for short or discontinuous time series, CR stands for inadequate catch rates. We're left with five surveys which are good candidates. That last slide was based on post settlement and adults. This next one here is for settlement and end-of-year indices.

But with the eight different surveys, from those we have six surveys that are possible candidates. The Nomandean Plankton Survey is probably not a good candidate, based on identification issues. They do identify the species for Cancer crabs, and the U. Maine

Deepwater Collectors have a fairly short, discontinuous time series.

Looking at fisheries removal's landings, there are three main issues that were discussed, one of which being species identification. There are two close related species, Jonah crabs and rock crabs, *Cancer Irroratus* and *Cancer Borealis*. Some parts of the range their search was a lot of crabs of both species.

There was some concern that some fishermen report rock crabs as Jonah crabs, and therefore, landings may be off. This is anticipated to be a minor issue to the scale of Jonah crab landings relative to those of other *Cancer* crabs. There is also concern about under reporting. This is anticipated to be a minor issue following stricter reporting requirements and increase in harvest value in volume in the mid-2000s.

Part of that period of time, it's thought that there may have been some cash sales at the dock, but we think that is less of an issue now. There is also concern about landing units, these were corrected where encountered. The TC believes that 2006 is likely a reliable start year for landings time period, with seasonal and spatial data available for this time series are available if needed.

Looking at Biosampling, the table down below has year on the far left and quarter or season in the next column, and going across it's steadier at 537, 526 and 525. These represent most of the landings for Jonah crab in the United States, Area 537, which is south of Massachusetts, lands about 70 percent of the Jonah crab landings by year, 526 and 525 represent about 10 percent of landings. The areas that have most of the landings were sampling better, with still some room for improvement.

The time series is still too short for use in population dynamics modeling approaches. The color codes there are red, we basically haven't sampled much at all, yellow is fully covered, and green is well covered, so 537 we also confirm we have the best sampling in that region report and sea

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sampling. There is number of trips there, number of samples.

Just looking at possible assessment approaches. This slide here represents the most likely methods we could use right now. Looking at stock indicators, the outputs, annual indicator values relative to time period-based reference values. This is used for American lobsters, spot and croaker.

We also use index-based methods. Outputs: Stock status based on ad-hoc historical time period or sustainable catch levels. This is used for horseshoe crabs. We have the data available, there are numerous options and flexibility, but there will be limited outputs. Other assessment models we could work towards would include biomass dynamics-based data poor models, or biomass dynamics models. We have data available, there are potential assumption violations.

Other models we could work towards in future assessments would be a Collie-Sissenwine Analysis, a Statistical Catch at Length Models. These have potential data limitations, but they have more robust outputs. The TC put together a list of priorities for research recommendations, starting with high, moderate and low.

I'll present here some of the high priority recommendations. The first one here is with genetics, for stock assessment purposes or stock ID purposes, rather. Information should be collected to help delineate stock boundaries, for example genetics. Identification of stock boundaries is an essential step in the stock assessment that will inform many subsequent steps including development of input data, and identification of methods applicable to the stocks.

Some genetic research is currently being conducted by GMGI that may address this recommendation. Female migration pathways, seasonality and larval duration and dispersal

need to be researched. Anecdotal information suggests seasonal aggregations in inshore areas, but research would help to understand these mechanisms and inform stock boundaries.

Basically, what we're looking for is to see if there is a connection between inshore areas and offshore areas for stock ID purposes. Inter-molt duration of adult crab is currently unknown, and growth increment data for mature crab is limited. These data will be necessary to transition to a size or age-based assessment method, similar to what is used for lobster.

More high priority research recommendations. We would like to see development of fishery independent surveys, for example ventless trap surveys, to index post settlement Jonah crab abundance from offshore areas, where most of the fishery is executed. We would also like to see an increase of fisheries dependent monitoring of the offshore fleet. Sampling intensity by stat area should be based on landings. We would also like to see reproductive studies pertaining to male/female spawning size ratios, the possibility of successful spawning by physiological mature, but morphometrically immature male crabs, and potential for sperm limitations should be conducted.

This is largely based because it's a male dominated fishery, about 99 percent of the crabs that are landed are males, so if you remove the larger males, what happens to the reproductive potential of the rest of the fishery? The amount of directed commercial effort on Jonah crab or lobster should be quantified on a per-trip basis.

This is a mixed crustacean fishery, so it would be helpful for catch-per-unit effort data if we know what the fishermen are targeting. The stock assessment schedule, the TC recognizes that Jonah crab is a data poor species with limited assessment options, but also a pressing need for a formal assessment, based on the things I discussed earlier.

The NRCC and ASMFC stock assessment schedules currently include a placeholder for a 2023 Jonah

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crab assessment. The TC recommends conducting a near-term stock assessment to be completed in 2023. With that I'll take any questions.

CHAIR MCKIERNAN: Thank you, Derek, that was highly informative. Are there any questions for Derek from the Board?

MS. KERNS: Right now, I have Jason McNamee.

CHAIR MCKIERNAN: Go ahead, Jason.

DR. McNAMEE: Thank you very much for the presentation, that was great. I thought what I would like to offer, in particular the discussion on the assessment types. I'll make a comment first, and just say I think there is nothing wrong, in particular when they are at kind of the advent of a species management, and an assessment process to allow that process to kind of evolve, you know start off with some simpler methods, and evolve as you collect the needed information.

I thought all of your research recommendations were spot on. I think those are critical for getting to that more analytical regime for assessment for this species. But what I wanted to flag for you, and for the Technical Committee is, the data limited tool kit is an option I think you all should investigate a little bit.

It's got, I think it's probably over 50 or 60 different data limited methods kind of built into it. It's in our package, and it has like a management strategy component built into it as well, so it has an ability to simulate. I think that would be a really valuable tool to investigate in the process, with the idea that you're going to have to use data limited approaches, at least in the beginning here. I just wanted to kind of put that on your radar.

MR. PERRY: Thank you, Jason, we'll look into that.

CHAIR MCKIERNAN: Thanks, Jason. Anyone else on the Board?

MS. KERNS: I don't see any additional hands.

CHAIR MCKIERNAN: Okay, so the deliverable for this Board is to potentially make a motion, take a vote on whether to initiate a stock assessment. Is there anyone on the Board that would like to do that?

MS. KERNS: Mr. Chairman, if there is just an oral consensus to do that, I don't think you need a written-out motion on the table. Just to make it easier for you. Ray Kane has his hand up.

CHAIR MCKIERNAN: Oh, Ray, have you got something?

MR. RAYMOND W. KANE: Yes, I realized my hand works, as soon as Eric started making that motion, the previous motion, I raised my hand and wasn't sure if my hand was working. **I move to initiate a stock assessment for Jonah crab to be completed in 2023.**

CHAIR MCKIERNAN: Thank you, Ray, is there a second?

MS. KERNS: David Borden.

CHAIR MCKIERNAN: Thank you, David, is there any discussion? If not, we'll go right to a vote.

MS. KERNS: I guess, Mr. Chairman, I think I've made this confusing for Maya, because I said you don't need a written-out motion. You know you don't really need this, but go ahead.

**CHAIR MCKIERNAN: All right, is there any objection to the motion? Hearing none, it is approved by unanimous consent.** Thank you, Toni. Well, we're pretty much on schedule. Thank you, Derek, for that great presentation and Jason for the feedback.

**CONSIDER DEVELOPMENT OF A  
MANAGEMENT STRATEGY EVALUATION OF  
THE AMERICAN LOBSTER FISHERIES**

CHAIR McKIERNAN: The second to the last item, Number 7 on the agenda is Development of a Management Strategy Evaluation of the American Lobster Fishery. Jeff Kipp.

MR. JEFF KIPP: I'm Jeff Kipp; I'm the Stock Assessment Scientist working on American Lobster and I'm here to talk about continuing development of a management strategy evaluation for American lobster. Just to recap the last discussion the Board had about this issue. The TC presented some recommendations at the last meeting, the May meeting, on a lobster MSE and the potential development of one.

The first recommendation was on the option the TC recommended, among some options they provided for, some potential pathways for a lobster MSE and that was a two-phased Gulf of Maine/Georges Bank focused MSE. They also provided two recommendations for next steps for developing an MSE.

The first was to form a steering committee to further guide development of an MSE, and develop a comprehensive, fully flushed out work plan for completing an MSE. The TC also provided a recommended next step of convening a management Objectives and Goals Workshop. Following the review of those recommendations, the Board postponed further consideration of MSE development until this meeting, the August, 2021 meeting. The reasoning for postponing and making that a motion was to prioritize work on Draft Addendum XXVII, acknowledging that there would be several folks that would overlap in working both on the Addendum and development of that Addendum, and sort of next steps in moving forward in MSE.

That motion was made in anticipation of Addendum XXVII being reviewed at this meeting for public comment, but as Caitlin showed

earlier, we're now anticipating the Addendum being reviewed at the October annual meeting, and so the timeline is a little different than when this motion was made.

But, because the motion was made specifically noting the August, 2021 meeting there is the need to bring this back up and get some Board guidance on how to proceed with a potential MSE for lobster. Now I'll go over just some additional detail, and the TCs recommended next steps, and then put forward a suggested path forward to the Board for consideration.

Again, the first next step that the TC recommended was developing a steering committee. The steering committee would complete additional scoping, including the format of stakeholder outreach opportunities, and processes within the MSE, and also for identifying all the funding sources, and all of the necessary personnel that would be needed for completing an MSE.

The Steering Committee charge would be to develop a comprehensive work plan, to ensure a successful MSE process, but not to direct the content within an MSE process. All of that information and process would develop as the MSE was formally initiated, and started going in to some of the milestones and workshops and stakeholder outreach parts of the MSE.

I just wanted to make that clear, that that was sort of the direction of the Technical Committee in that recommendation. The MSE start date would depend on completion of that management workshop, Management Objectives and Goals Workshop, and the outcome of the Steering Committee finding.

The idea here is that this Steering Committee is sort of a preliminary step. They would provide a comprehensive work plan, so that the Board can understand all of the components of an MSE, and then following that the Board would decide whether the MSE would be formally started, or not. The next step recommended by the TC was a management workshop.

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This was recommended because there was recognition that the Technical Committee, and also this Steering Committee if formed, would need Board and stakeholder input to guide the MSE. The idea of this management workshop would be to provide big picture goals, both short and long term, to guide the focus of the two phases of that Gulf of Maine/Georges Bank MSE.

The Technical Committee offered an example to follow that was the Management Objectives Workshop with the Commission, coordinated when developing ecological reference points. It's just noted that this should be conducted parallel to the Steering Committee's work and development of a work plan, so that the final recommendations of the Steering Committee are relevant to the objectives and goals for the future of the lobster fishery. For the next steps, because again the Board postponed further consideration of developing an MSE until this meeting. Staff got together and thought out a plan of where we could go from here, recognizing that Addendum XXVII work does continue. What could potentially be done in progressing an MSE, while not impeding the necessary work for finalizing Addendum XXVII.

The proposed next step here would be to move forward with the development of a steering committee. I think staff generally saw this as something that can be done to further develop an MSE, that isn't going to require considerable work, particularly on folks that are continuing to work on Addendum XXVII work, the Technical Committee members and PDT members.

If this was agreed to by the Board the staff could continue to work with Board and TC members, sort of behind the scenes and, as time allows, to populate the steering committee and get the correct representation on that committee. Then the idea here would be that we could have a steering committee formed, and bring that back to the Board for their review, and consensus once Addendum XXVII is completed.

Just to provide a timeline, noting Addendum XXVII work that is ongoing, and these potential next steps for an MSE. At this meeting, if the Board chooses, staff could begin to work with Board members and TC to populate that MSE Steering Committee. At the annual meeting in October, the Board will be reviewing, and hopefully approving, Draft Addendum XXVII for public comment, and then between annual meeting and the next Commission meeting in February of 2022, the Addendum XXVII draft would go out for public hearings.

Again, staff could continue to work on reaching out to the right folks to populate an MSE Steering Committee. Then we would get to the winter meeting in February, 2022, the Board would be reviewing the final Draft Addendum XXVII, and following that the Board could review the membership of the MSE Steering Committee that was developed over the next several months.

Then following, hopefully approval of Draft Addendum XXVII at the February meeting, work on MSE and development of an MSE could then pick up following that meeting, where the MSE Steering Committee meets, and starts to work on this work plan, and also along with that could be coordinating and developing this Management Goals and Objectives Workshop. Those are the proposed next steps for continuing development of a lobster MSE, and that's all I had to show, and I can stop and see if there are any questions on what I showed.

CHAIR McKIERNAN: Any questions from the Board?

MS. KERNS: You have Pat Keliher.

CHAIR McKIERNAN: Go ahead, Pat.

MR. KELIHER: Jeff, thanks for that update. Jeff, can you just explain to me what you're thinking of for the makeup of the Steering Committee science, either science/technical, policy? The reason I ask is we have now added a second addendum to everybody's work list or work plans. As the maker of the motion the last time to delay, my thinking was we would delay with the understanding where we were going with Addendum XXVII, now we've got a second Addendum that frankly I think

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personally, I would have it take precedence over the Resiliency Addendum. But I think that is for some further Board discussion, possibly. But I'm afraid we've made our mess even worse now, when it comes to MSE, and we may need to think about postponing until a date later out in the year, into 2022.

MR. KIPP: Yes, thanks for your question. I may have glossed over one slide I had there that did provide some detail on the TCs recommendation for the membership of the steering committee, so apologies for that. But the TC did recommend representatives from the Board, from the Technical Committee, from ASMFC staff, industry stakeholders, folks from the Commission's Committee on Economics and Social Sciences, and potentially some members from the Commission's Assessment and Science Committee.

That was kind of the background the TC thought would be necessary for the Steering Committee, and the TC did make a note that it would be ideal to have some members amongst those folks with MSE experience to guide this. For a number of Steering Committee members, the TC recommended 12 as a maximum, and potentially fewer than that, but that is sort of the details of the membership that the TC recommended.

MR. KELIHER: Just a follow up comment, Mr. Chairman.

CHAIR MCKIERNAN: Yes, go ahead, Pat.

MR. KELIHER: Yes, I just want to reiterate the workload that we have in front of us with the two addendums. I hate to continue to delay work on MSE, I think it does have some merit to do that work. I'm not sure if the pending whale conservation framework might not trump some of this as it progresses, but I certainly don't want to not start the process in some of those important conversations. I just think we need to have a realistic conversation about the

timing of initiating any MSE Steering Committee. Thank you.

CHAIR MCKIERNAN: Any other Board members like to weigh in? Toni, my screen is just plain blue, so I'm not sure if everyone else is seeing that.

MS. KERNS: Yes, it's not just you.

CHAIR MCKIERNAN: Okay, so if you could help me. Are there any other Board members with their hands up?

MS. KERNS: David Borden.

CHAIR MCKIERNAN: Great, thank you. David Borden.

MR. BORDEN: Mr. Chairman, I don't know if this is appropriate now, or under other business, but I want to talk about the issue that Pat Keliher brought up on priorities. Do you want to mix it with this agenda item, or do you want to take it up separately?

CHAIR MCKIERNAN: This is the final item for the agenda, so if you think that we can blend these, and still get through the agenda, because this is our last item of business, so go ahead.

MR. BORDEN: Okay, and I'll keep this brief. I agree with some of what Pat said, but I would come at it from a slightly different perspective. I think the priorities, I mean we have limits on staff time and technical time. That is what we're all talking about. We've got this kind of a parallel issue of; how do we deal with work priorities.

All of these issues are important, and I don't think anybody would dispute that. But given the limitations on staff time, I think at the next meeting we should have a discussion on priorities. My own view, so everyone knows where I'm going with this. My own view is Resilience Amendment should be split into two parts; the first phase would be some fairly simple, straightforward adjustments to some of the measures.

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We would stay away from the more complicated issues of triggers and gauge changes and so forth. Then the second priority would be the tracking action, and then the third priority, I think would be Phase 2 of Resilience. Then the Management Strategy Evaluation would come in with Phase 2. To me, and I'm just offering that. We don't need to debate that. I'm just offering that so people know my thinking on it. I think we have to prioritize some of these actions, and get on with the ones that we think are most important, and really use our staff time wisely.

CHAIR McKIERNAN: Well David, before you go away. I mean from my perspective as the Director at Mass DMF, I'm seeing a different set of staff working on tracking than would be working on those other issues. I don't know how the other states see that, but I wouldn't want to back burner the Tracking Addendum, because of the workload associated with Resiliency. I don't know if Pat or Jason or Cheri want to weigh in about those staff assignments, relative to those different tasks.

MR. BORDEN: My only comment, Mr. Chairman would be that your perspective is probably a function of the number of staff you have.

MS. KERNS: You have Pat Keliher with his hand up.

CHAIR McKIERNAN: Go ahead, Pat.

MS. KERNS: Then Jason McNamee behind.

MR. KELIHER: Your point around staffing. There is a difference, at least around for us. I was thinking kind of more holistically up and down the coast, but for Maine we would have different staff working on the Tracker Addendum versus Resiliency Addendum, so from that standpoint, I do agree. If other states are in the similar situation, then maybe those two do move forward at the same time. David's point around splitting Resiliency, I'm not sure I'm there yet. I would need to think about it

and talk more about it. I'm certainly open to the discussion.

CHAIR McKIERNAN: Is that a discussion that can take place at the next meeting, based on whatever progress is made on those two issues?

MR. KELIHER: Yes, I mean we're going to be potentially splitting it and moving portions of it ahead for public hearing, instead of the entire document, so possibly we could take that approach.

CHAIR McKIERNAN: All right, Jason.

DR. McNAMEE: Maybe I'll start off with a general comment. You know, as we kind of came into this meeting, I was looking and you know this group has high activity level, high overlap, and we're asking for a lot of stuff. For me it's hard. I think the MSE is very important, but I'm in line with the comments generally that you've heard so far, where I'm okay if the MSE gets pushed a little bit, as long as it stays on the radar.

But if it gets pushed to clear the decks a little bit here, with some of this other stuff, that I agree is important, and also more pressing, you know currently than it will be to have the MSE completed. I also have a little bit of comfort that I think there is going to be some work going on in the background, you know with some, I don't know if the grants have been awarded or whatever, but I know there is interest out there in kind of getting some of this work started.

My hope is that some of that proceeds and so it won't be like starting from scratch whenever we do get back to the MSE, but long story short, I think, you know thinking about priorities, the Tracking Addendum, which we just approved, lump on top of that the Jonah crab assessment, which I think will have some of that high overlap that is indicated in the meeting materials.

I think it makes sense to kind of postpone working on the MSE for a bit. I'm not sure the exact thing, and maybe that's something we should discuss before we dispense with this. But I just wanted to

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get on the record to let folks know that I was comfortable punching on the MSE for a little bit, to get working on some of this other stuff quicker.

CHAIR McKIERNAN: Jeff, would it make sense for you to bring up that last slide that had to do with scheduling, and get your feedback on what you're hearing from Board members, and how you think this could proceed?

MR. KIPP: Yes, I can bring that up.

MS. KERNS: Dan, while he's doing that. Cheri and then David have their hands in the queue.

CHAIR McKIERNAN: Go ahead, Jeff.

MR. KIPP: This is the slide with that timeline, and this is just acknowledging again sort of where we know we're going with Addendum XXVII, and those recommendations on sort of proceeding with MSE development. Notably, the TC recommended next steps. The point was made that this doesn't include the now initiated addendum on Tracking, so that is not captured here. But this would be based on sort of staff's recommended next steps for MSE.

CHAIR McKIERNAN: I apologize, Toni, I didn't write down those names that are in the queue.

MS. KERNS: No worries, I have Cheri and then I think David.

CHAIR McKIERNAN: David Borden again.

MS. KERNS: Yes.

CHAIR McKIERNAN: All right, Cheri.

MS. PATTERSON: I agree with Pat. I think we're going to have a heavy lift with the Tracking. If we can slow down the MSE, I think that that would be better overall, considering we have the Tracking and the Jonah crab stock assessment, which is dealing with a data poor species, that has a tendency to add its own complexity. If there is some suggested timeline

at the next meeting, from Jeff, to indicate how it can still be moving forward, but just be at a slower track. I think I would appreciate that. Thanks.

CHAIR McKIERNAN: David Borden.

MR. BORDEN: Just a quick point, Mr. Chairman. As I suggested before, I think once we get more information at the next meeting, we'll be able to have a more informed discussion of this. I think that is a timeline that we should act on it. The only reason I floated those ideas was, I wanted people to think about them in the interim phase. Thank you.

CHAIR McKIERNAN: Jeff, I'm looking at this third line. It looks like the November to December is when, no I'm sorry. The August/October staff begin to work to populate the MSE Steering Committee. Can that be delayed by a quarter or two, and would it effect the ability to pursue the funding, for which you folks I think are going to have to pursue to accomplish this?

MR. KIPP: No, I mean I think this was just to kind of keep the ball rolling. Developing the Steering Committee was seen as something that would require minimal work that could occur in the background, sort of just some leg work that could get done between now and the February meeting, when Addendum XXVII is to be completed.

I think that this could be delayed, and we could still meet the timeline of coming to the February meeting with an MSE Steering Committee formed. It's basically just going to be getting recommendations from technical folks and some of those folks from things like the Committee on Socioeconomics and Science.

You know I think that that can be done on a shorter timeframe, something like, you know if it was the annual meeting and the Board was okay with moving forward with developing that Steering Committee. I don't think that would necessarily delay things too much, relative to how they are laid out here. I don't know if that answers your question, Dan.

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CHAIR McKIERNAN: I guess I would ask Pat Keliher to weigh in. It sounds like Jeff is recommending that we still create a steering committee between now and, or maybe between now and the meeting, or maybe at the next meeting, but slow walk it a little bit after that. Is that what I'm hearing? Pat, are you good if we still create a Steering Committee, say at the next Board meeting in October?

MR. KELIHER: We would create the Steering Committee at that meeting?

CHAIR McKIERNAN: I think that is what Jeff is sort of implying. Jeff?

MR. KIPP: No, I think the idea here was that that would be sort of initiated right now, if we went with the suggested timeline here, and then the Board would review the membership at the February meeting, so they would review final draft of Addendum 27, and then the next step would be to review the MSE Steering Committee membership at that February meeting.

It could be something where we just hold off for now, or we revisit this at the annual meeting, and if the Board would change their direction there, and consider going to Steering Committee at that point, I think we could stay on that February timeframe, or we can just consider developing the Steering Committee, which would be the next step from the TC, I think. I think any way we lay it out on a timeline here, that would be the next step. If the Board thinks that it is necessary to delay that further than the February meeting, that could be reflected in a timeline here.

CHAIR McKIERNAN: Go ahead, Pat.

MR. KELIHER: Mr. Chairman, I like the idea of delaying, and having this conversation at the annual meeting, because frankly it may give some of us the opportunity to just have an informal meeting around staff constraints, because if we were trying to do something between now and then, I would say the ability

for Maine DMR staff to participate would be severely limited. But if we can all get on to the same page between now and the October meeting, that may be a better use of time.

CHAIR McKIERNAN: Okay, so we're hitting the pause button, and we're going to reconvene on this issue at the October meeting, and just continue the conversation. Maybe individual states can maybe bring forward some potential names at that point, or be thinking about who they would like to nominate. Do I have that right?

MR. KELIHER: I think that would be a good idea, Mr. Chairman, and then a bunch of us could just jump on a call at some point, when the time is right between now and October, just to talk about the complexities and the timing issues.

CHAIR McKIERNAN: Okay, Toni, did you want to speak up?

MS. KERNS: It's all good, Dan.

CHAIR McKIERNAN: All right, so we're good? Any other discussion on this matter?

MS. KERNS: I don't see any other hands.

**OTHER BUSINESS/ADJOURN ADJOURNMENT**

CHAIR McKIERNAN: Cool. All right, is there any other business to come before the Board? No, Toni?

MS. KERNS: No hands, sorry.

CHAIR McKIERNAN: Well, thank you everyone.

(Whereupon the meeting convened at 3:40 p.m. on Monday, August 2, 2021.)