Atlantic States Marine Fisheries Commission

American Lobster Management Board

May 1, 2023 12:45 – 2:30 p.m. Hybrid Meeting

Draft Agenda

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

1.	Welcome/Call to Order (J. McNamee)	12:45 p.m.
2.	Board ConsentApproval of AgendaApproval of Proceedings from January 2023	12:45 p.m.
3.	Public Comment	12:50 p.m.
4.	 Consider Addendum XXVII on Increasing Protection of Spawning Stock Biomass of the Gulf of Maine/Georges Bank Stock for Final Approval Final Action Review Options and Public Comment Summary (C. Starks) Advisory Panel Report (G. Moore) Consider Final Approval of Addendum XXVII 	1:00 p.m.
5.	Update from Work Group on Implementation of Addendum XXIX: Tracker Devices in the Federal Lobster and Jonah Crab Fishery (<i>T. Kerns</i>)	2:00 p.m.
6.	Progress Update on 2023 Jonah Crab Benchmark Stock Assessment (J. Kipp)	2:10 p.m.
7.	Review Lobster Conservation Management Team Roles and Process (C. Starks)	2:20 p.m.
8.	Other Business/ Adjourn	2:30 p.m.

The meeting will be held at The Westin Crystal City (1800 Richmond Highway, Arlington, VA; 703.486.1111) and via webinar; click <u>here</u> for details

MEETING OVERVIEW

American Lobster Management Board May 1, 2023 12:45 – 2:30 p.m. Hybrid Meeting

Chair: Dr. Jason McNamee (RI)	Technical Committee Chair:	Law Enforcement Committee
Assumed Chairmanship: 02/22	Kathleen Reardon (ME)	Representative: Rob Beal (ME)
Vice Chair:	Advisory Panel Chair:	Previous Board Meeting:
Pat Keliher (ME)	Grant Moore (MA)	January 31, 2023
Voting Members: ME, NH, MA, RI, CT, NY, NJ, DE, MD, VA, NMFS, NEFMC (12 votes)		

2. Board Consent

- Approval of Agenda
- Approval of Proceedings from January 31, 2023

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

4. Consider Addendum XXVII on Increasing Protection of Spawning Stock Biomass of the Gulf of Maine/Georges Bank Stock for Final Approval (1:00-2:00 p.m.) Final Action

Background

- Draft Addendum XXVII considers modifications to the management program with the goal of increasing protection of the GOM/GBK spawning stock. Two issues are included in the addendum. Issue 1 addresses the standardization of a subset of management measures within LCMAs and across the GOM/GBK stock. Issue 2 considers applying either a trigger mechanism or a predetermined schedule for implementing biological management measures that are expected to provide increased protection to the spawning stock biomass and increase the resiliency of the stock. The Board approved Draft Addendum XXVII for public comment in January 2023 (**Briefing Materials**).
- Public comment was gathered in March and April, 2023 (Briefing Materials).
- The Advisory Panel (AP) met on April 10, 2023 to review the Addendum options and public comments (**Briefing Materials**).

Presentations

Draft Addendum XXVII Options and Public Comment Summary by C. Starks

• Advisory Panel Report by G. Moore

Board Actions for Consideration at the Meeting

- Select management options and implementation dates
- Approve final Addendum XXVII

5. Update from Work Group on Implementation of Addendum XXIX: Tracker Devices in the Federal Lobster and Jonah Crab Fishery (2:00 – 2:10 p.m.)

Background

- In March 2022, the Board approved Addendum XXIX to Amendment 3 to the Interstate Fishery Management Plan (FMP) for American Lobster and Addendum IV to the Jonah Crab FMP. The Addenda establish electronic tracking requirements for federallypermitted vessels in the American lobster and Jonah crab fisheries with commercial trap gear area permits for Lobster Conservation Management Areas (LCMAs) 1, 2, 3, 4, 5, and Outer Cape Cod to collect location data via an approved electronic tracking device.
- Commission staff formed a Work Group comprised of state and federal partners to develop a request for quotes from vessel tracking device manufacturers. The request for quotes was released in the fall of 2020. The Work Group reviewed five proposals, and has approved a list of tracking devices for use in the fishery.
- Commission and ACCSP staff are working with state and federal partners to develop regulations, data platforms, and administrative processes for the tracking program.

Presentations

Update on Implementation of Addendum XXIX by T. Kerns

6. Progress Update on 2023 Jonah Crab Benchmark Stock Assessment (2:10-2:20 p.m.) Background

- The first benchmark stock assessment for Jonah crab is ongoing and scheduled for completion in 2023.
- The assessment workshop is scheduled for April 18-20, 2023.
- A peer review workshop will be scheduled for the summer of 2023.

Presentations

Progress Update on 2023 Jonah Crab Benchmark Stock Assessment by J. Kipp

7. Review Lobster Conservation Management Team Roles and Process (2:10-2:20 p.m.) Background

• Amendment 3 established the seven lobster conservation management areas (LCMAs): Inshore and offshore GOM (Area 1), Inshore SNE (Area 2), Offshore Waters (Area 3), Inshore and offshore Northern Mid-Atlantic (Area 4), Inshore and offshore Southern Mid-Atlantic (Area 5), Long Island Sound (Area 6) and Outer Cape Cod). Lobster Conservation Management Teams (LCMTs), composed of industry representatives, were formed for each management area. • It has been a number of years since the LCMTs were convened to provide management advice, warranting a review of the LCMT operating procedures (Briefing Materials).

Presentations

• Overview of Lobster Conservation Management Team Roles and Process by C. Starks

8. Other Business/ Adjourn

American Lobster and Jonah Crab TC Task List

Activity level: Medium

Committee Overlap Score: Medium

Committee Task List		
Lobster TC		
 August 1, 2023: Annual Compliance Reports Due 		
 Fall 2023: Annual data update of lobster abundance indices 		
longh Crah TC		

Jonah Crab TC

- Spring-Summer 2023: Development of Jonah crab stock assessment
- August 1, 2023: Annual Compliance Reports Due

TC Members

<u>American Lobster:</u> Kathleen Reardon (ME, TC Chair), Joshua Carloni (NH), Jeff Kipp (ASMFC), Catherine Fede (NY), Conor McManus (RI), Chad Power (NJ), Tracy Pugh (MA), Burton Shank (NOAA), Craig Weedon (MD), Somers Smott (VA), Renee St. Amand (CT)

<u>Jonah Crab:</u> Derek Perry (MA, TC Chair), Joshua Carloni (NH), Chad Power (NJ), Jeff Kipp (ASMFC), Conor McManus (RI), Allison Murphy (NOAA), Kathleen Reardon (ME), Chris Scott (NY), Burton Shank (NOAA), Somers Smott (VA), Corinne Truesdale (RI), Craig Weedon (MD)

Jonah Crab Stock Assessment Subcommittee (SAS) Members Jonah Crab: Derek Perry (MA, TC Chair), Joshua Carloni (NH), Jeff Kipp (ASMFC), Kathleen Reardon (ME), Burton Shank (NOAA), Corinne Truesdale (RI), Jeremy Collie (URI)

Addendum XXVII PDT Members <u>American Lobster:</u> Kathleen Reardon (ME), Joshua Carloni (NH), Robert Glenn (MA), Corinne Truesdale (RI), Allison Murphy (NOAA)

DRAFT PROCEEDINGS OF THE

ATLANTIC STATES MARINE FISHERIES COMMISSION

AMERICAN LOBSTER MANAGEMENT BOARD

The Westin Crystal City Arlington, Virginia Hybrid Meeting

January 31, 2023

TABLE OF CONTENTS

Call to Order, Chair Jason McNamee1
Approval of Agenda1
Approval of Proceedings from November 7, 20221
Public Comment1
Comments from Assistant Administrator from NOAA1
Review Report from the Atlantic Large Whale Take Reduction Team and Progress on Atlantic Large Whale Take Reduction Plan
Consider Draft Addendum XXVII on Increasing Protection of Spawning Stock Biomass of the Gulf of Maine/Georges Bank Stock
Update from the Working Group on Implementation of Addendum XXIX on Electric Vessel Tracking for Federal Permit Holders
Other Business 100 Percent Harvest Reporting for the State of Maine24
Adjournment

INDEX OF MOTIONS

- 1. Approval of agenda by consent (Page 1).
- 2. Approval of Proceedings of November 7, 2022 by consent (Page 1).
- 3. Move to modify Option E by including a 1/4" maximum gauge reduction in LCMA 3 with each annual adjustment, and set a maximum gauge size in the OCC management area of 6 ½" and include a 1/4" maximum gauge reduction in OCC with each annual adjustment. In the final year of adjustments, the maximum gauge size in LCMA 3 and OCC would be 6" at a minimum. The vent size in LCMA 1, LCMA 3 and OCC would be adjusted once, at the same time the final gauge size is implemented. The Board, during final action will specify the years of the schedule, with the first step occurring no later than 2026, and the second step occurring 2 years later (Page 18).

Motion by Pat Keliher; second by Emerson Hasbrouck. Motion approved by consensus (Page 21).

- 4. **Move to approve Addendum XXVII for public comment, as amended today** (Page 21). Motion by Doug Grout; second by Steve Train. Motion carried (Page 22).
- 5. **Move to adjourn** by consent (Page 26).

ATTENDANCE

Board Members

Pat Keliher, ME (AA) Stephen Train, ME (GA) Rep. Allison Hepler, ME (LA) Renee Zobel, NH, proxy for C. Patterson (AA) Doug Grout, NH (GA) Dennis Abbott, NH, proxy for Sen. Watters (LA) Dan McKiernan, MA (AA) Raymond Kane, MA (AA) Raymond Kane, MA (GA) Rep. Sarah Peake, MA (LA) Jason McNamee, RI (AA) David Borden, RI (GA) Eric Reid, RI, proxy for Sen. Sosnowski (LA) Colleen Bouffard, CT, proxy for J. Davis (AA) Bill Hyatt, CT (GA) John Maniscalco, NY, proxy for B. Seggos (AA) Emerson Hasbrouck, NY (GA) Joe Cimino, NJ (AA) Peter Clarke, NJ, proxy for T. Fote (GA) Adam Nowalsky, NJ, proxy for Sen. Gopal (LA) John Clark, DE (AA) Roy Miller, DE (GA) Craig Pugh, DE, proxy for Rep. Carson (LA) Dave Sikorski, MD, proxy for Del. Stein (LA) Mike Luisi, MD, proxy for L. Fegley (AA, Acting) Shanna Madsen, VA, proxy for J. Green (AA) Jay Hermsen, NOAA proxy for A. Murphy Janet Coit, NOAA Sam Rauch, NOAA

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

Ex-Officio Members

Kathleen Reardon, Technical Committee Chair Rob Beal, Law Enforcement Committee Rep. Staff Bob Beal Kristen Anstead Chris Jacobs Toni Kerns Mike Rinaldi Lindsey Aubart Madeline Musante Pat Campfield Geoff White Julie DeFilippi Simpson **Tina Berger** Guests Justin Davis, CT (AA) Max Appelman, NMFS Kiana Kekoa, Ofc. Sen. Reed Pat Augustine, Coram, NY Sam Duggan, NOAA Ashley Law, Ofc. Sen. Blumenthal Glen Fernandes Richard Balouskus, RI DEM Ed Liccione Alan Bianchi, NC DENR Joe Fessenden Eric Lorentzen Delayne Brown, NH F&G Jared Flowers, GA DNR Chip Lynch, NOAA Jerry Mannen, NC (GA) Michael Brown, ME DMR Lauren Gaches, NOAA Jeff Brust, NJ DEP Emily Gilbert, NOAA Genine McClair, MD DNR Josh Carloni, NH F&G Lewis Gillingham, VMRC Kim McKown Beth Casoni, MLA Angela Giuliano, MD DNR Conor McManus, RI DMF Nicole Caudell, MD DNR Jennifer Goebel, NOAA Sean McNally, NOAA Matt Cieri, ME DMR Jon Hare, NOAA Meredith Mendelson, ME DMR Barry Clifford, NOAA Amalia Harrington, Univ ME **Steve Meyers** Heather Corbett, NJ DEP Olin Hartkopf, Ofc. Sen. King Jeffrey Nichols, ME DMR Jamie Cournane, NEFMC Marin Hawk, MSC Scott Olszewski, RI DEM Jessica Daher, NJ DEP Heidi Henninger, AOLA Gerry O'Neill, Cape Seafoods

Guests (continued)

Jeffrey Pierce, Dresden, ME Michael Pierdinock Nicole Pitts, NOAA Tracy Pugh, MA DMF Rebecca Quinones, MA DMF Elizabeth Rasheed, SELCNC Gray Redding, NFWF Story Reed, MA DMF Sen. Cameron Reny, ME Mike Ruccio, NOAA Erin Schnettler, NOAA Chris Scott, NYS DEC Phillip Sheffield Ethan Simpson, VMRC Molly Smith Somers Smott, VMRC Ariana Spawn, Ofc. Sen. Booker Renee St. Amand, CT DEEP David Stormer, DE DFW ElizaBeth Streifeneder, NYS DEC Kevin Sullivan, NH F&G Jason Surma, Woods Hole Group Pam Thames, NOAA Marisa Trego, NOAA Maureen Trinka, NOAA Mike Waine, ASA Jesica Waller, ME DMR Megan Ware, ME DMR Craig Weedon, MD DNR Ben Whalley Ritchie White, CCA NH Holly White, NC DENR Wes Wolfe Chris Wright, NOAA Angela Young, ME Elvers Darrel Young, ME Elvers Erik Zlokovitz, MD DNR The American Lobster Management Board of the Atlantic States Marine Fisheries Commission convened in the Jefferson Ballroom of the Westin Crystal City Hotel, Arlington, Virginia, via hybrid meeting, in-person and webinar; Tuesday, January 31, 2023, and was called to order at 10:00 a.m. by Chair Jason McNamee.

CALL TO ORDER

CHAIR JASON McNAMEE: Good morning, everybody; I'm calling to order the American Lobster Management Board. I hope everybody is doing well. The first thing we're going to start with is the agenda.

APPROVAL OF AGENDA

CHAIR McNAMEE: We have an Agenda that has been published for the meeting.

I have one modification that I will add, and that is to give a couple of minutes to the Assistant Administrator from NOAA Fisheries to give a few comments. We'll take that up right after we dispense with the proceedings from our November meeting. Are there any other modifications to the agenda? Okay, Pat, go ahead.

MR. PATRICK C. KELIHER: Just under Other Business, I've got a quick update on 100 percent harvest reporting for the state of Maine.

CHAIR McNAMEE: What was the topic again, Pat? I'm sorry, I didn't hear it. Very good, thank you. Okay, any other changes? Seeing none; I'll ask the question. Is the agenda approved as modified? Any objections to approving the agenda as modified? Seeing no objections, we'll consider that approved.

APPROVAL OF PROCEEDINGS

CHAIR McNAMEE: Next, we'll move on to the proceedings from our November meeting. Are there any changes, edits, deletions, any other sort of thing to those proceedings? All right,

seeing no hands, we will consider the proceedings approved as submitted.

PUBLIC COMMENT

CHAIR McNAMEE: Moving on, let's take a moment here to see if there is any public comment that anyone wants to make.

This would be public comment on things that are not already on the agenda. Looking around the room first, not seeing any hands. Any hands on the webinar? Okay, so there are no public comments, and why don't we then dig into our meeting.

COMMENTS FROM ASSISTANT ADMINISTRATOR FROM NOAA

As we modified the agenda, it is my honor and pleasure to introduce Janet Coit; Comments from Assistant Administrator from NOAA the Assistant Administrator from NOAA Fisheries, who would like to address the Board. Janet, whenever you're ready, please take it away.

MS. JANET COIT: Good morning, everyone. It's great to see all of you. Some of you I've gotten to know in person, and others I know your names very well, and I look forward to meeting you. I'm Janet Coit; as Jason said, and Jay and I work very closely together, so I have the utmost respect for him, and it's nice to be here with him as the Chair of the Lobster Board. I'm also here with another person I have utmost respect for, who is Sam Rauch, who is the Deputy Assistant Administrator of NOAA Fisheries. I know ASMFC very well, 35, 40 years ago when I worked for Senator John Chafee and we were working on striped bass conservation, we worked very closely with ASMFC, so I guess that dates me a bit.

I also was officially part of this Commission, when I was the head of the Rhode Island DEM. I just think it's a constructive, important venue, the way it brings state legislators and the representative state leaders together with NOAA and scientists and stakeholders. You're really a terrific entity, and we

have a lot of tough issues, and I'm really glad you're taking them on.

I wanted to talk to, and among those issues, of course, are climate change, and how our ecosystems are changing, which are affecting lobster and plankton, and the things for which plankton are prey. That brings me to talking about lobster and right whales. That's what I wanted to talk to you today.

The lobster sector is incredibly important to our nation. It's the economy of Maine and other states, and I know we're all here wanting to see it be sustainable, and continue to be an important industry going forward. We also, I think are all committed in wanting to conserve and restore threatened and endangered species.

The endangered North Atlantic Right Whale is really on the brink. Preventing its decline and conserving North Atlantic Right Whales, that's a tall task. We're legally required to do that under the Endangered Species Act, legally required to achieve Marine Mammal Protection Act Standards, and that is going to require us working together, and collaborating.

I wanted to give you, really an update and just a few thoughts, and urge that we collaborate and be as strategic and as thoughtful and as forceful as we can right now. A couple actions that you're probably aware of. NMFS has a Proposed Rule out on vessel speed. The second most lethal problem for right whales is vessel strikes, and we have a Proposed Rule out.

I believe the comment period closes shortly, and we'll be taking a look at thousands of comments, and looking at the best way to approach reducing vessel strikes. We also, Dan, are publishing the Ledge Rule today, which is something that is an emergency rule, and I think you are all aware we did it last year, and it's important to remove gear that is either being used or staged in that ledge area in Cape Cod this time of year, when whales are congregating.

Really appreciate the leadership of the state of Massachusetts. We're continuing to consider how offshore wind affects right whales and other mammals and species. That is a tremendous task for NOAA Fisheries, and something we're putting a lot of resources in. You may have seen the guidance that we developed together with BOEM and also, we had right whale communication.

That is something we're trying to finalize, but we didn't want the identified research needs and gaps, things like understanding better the oceanographic impacts of these large wind farms, and how they affect productivity and placement, and how that might affect species like right whales. There is a lot that needs to be studied further. Then here is the work that we're doing together on developing ropeless gear. That is what I primarily wanted to talk about today. I know that for any of these issues, understanding the stakeholders and the sociology, for lack of a better word, you know what motivates people, what their concerns are, is part of being successful well beyond the technology.

I wanted to review quickly. If you don't already know about the provision in the FY23 Omnibus Budget Bill or Appropriations Bill, you will now. But I imagine everyone in the room does. We have a new legislation that was enacted in December that declared that our 2021 Final Rules of the Take Reduction Team worked on that NOAA promulgated in the Fall of 2021.

That law says that rule is sufficient to ensure that the federal and state American lobster and Jonah crab fisheries are in full compliance with the Marine Mammal Protection Act and the Endangered Species Act. That term of this provision gave us until December of 2028 to implement additional whale protections. Essentially, the rule we were working on with the TRT, and under the District Court remedy is now put off for another six years.

Between now and then we need to work really hard together on additional options to protect right whales. Fortunately, that Omnibus Bill also

included significant resources, including a large uptick to the ASMFC to work on developing ropeless gear, to work on developing better approaches to monitoring right whales, to consider what might be the foundations for a different approach, a dynamic approach to management.

I wanted to come here both because I wanted to address this group, which I haven't had a chance since I started in June, 2021, to address. But also, just to emphasize how important it is that we collaborate and are strategic about how we work with that pot of money, which is a total 26 million dollars to ASMFC for, not just ropeless gear, for a number of other monitoring and cost recovery.

But, I think primarily, that what I am anticipating is that we're working on all of the antecedent steps to having ropeless gear available, so that it can be used in closed areas close to vertical lines when you get to the 2028 Rule. We also have a new 20-million-dollar pot of money in that Omnibus Bill that we can work with the National Fish and Wildlife Foundation, an entity that is a partner to NOAA, and that can attract and leverage other funding, or we can do our own grant program.

But whatever we do, Congress has let us know they also would like to see that funding go primarily for on-demand for ropeless gear. The grantees for that 20 million dollar pot of money are much broader, it's not going to the states or through the states. But we are right now considering, how do we couple that with the money that ASMFC has to have the biggest bang for the buck.

There is also additional funds in that Bill that come to NOAA Fisheries, for additional work in the Gulf of Maine. There are some requirements for that bill. There is a lot of attention, while Congress can get a longer lead time for the next set of regulations. They also gave us tens of millions of additional funding, and we're looking at whether or how we might supplement that with our Inflation Reduction Act Funding. We're still a few steps to go in that, so we can't announce anything. But essentially, it's just we have a moment, we have a historic moment in time where we can further right whale conservation, where we can potentially stop the decline and develop technologies and test pilot them, and work with people who are on the water, who are the best experts.

Working with the states, working with the state of Maine, working with a Sea Grant, which also got funding. Working with our industry, and we need to really put our shoulders to the wheel. Now Jason likes to quote the Jedi Master, Yoda. He probably has an appropriate quote for this. I like to quote country song writers.

One of the absolute bests is Willie Nelson, who turns 90 in April, and I just keep thinking of his song, Pick Up the Tempo. Pick up the tempo just a little, and bring it on home. We have got to accelerate this work. NOAA has been working with industry partners, NOAA has been working with some of the environmental stakeholders who are helping test different technology, encourage folks to try it out.

But, we have got to accelerate this work if we're going to have the necessary protections for right whales ready in time for that 2028 Rulemaking. If 2028 doesn't seem around the corner, but when you think of all the work that we need to do, and how far we need to go, and all the stakeholders and the TRT process. We would need to get going right away.

Among our challenges that I wanted to leave you with in regard, well how do we do things differently than we have in the past? You know what is the array of new technologies that we can develop and test pilot? How do we improve our monitoring, our modeling? How do we better understand what is happening with changing ecosystems to inform our decision making?

How do we think about managing in a changing environment? How do we think about managing in a more dynamic way? Those are some of the issues

I hope the Lobster Board and the Commission will consider, and continue to work with us, at GARFO, at the Northeast Science Center with Kim Damon-Randall in our Office of Protected Resources, with Sam.

We have a new right whale initiative across NOAA Fisheries, because we're committed to thinking both broadly and being innovative, but also looking at how all these component parts connect. It's truly, well Commissioners, with that 26 million dollars we have to think about how you are using it, versus how we are using it, and how these things connect.

To be successful we need to work together. I have the utmost confidence in Jason as your Chair, and the members of this Board. When I think about the spawning biomass resilient measures that you're about to discuss, they take a long time, like too long. I think that fisheries, I often feel impatient with fisheries regulation, and with changing ecosystems.

You know we have to move more quickly. I'm just urging everyone, we need to be thoughtful, we need to look before we leap. But we need to move in coordination, and we need to move quickly, if we're going to both conserve right whales and be ready in time for new rule making, and have more options on the table that allow our American lobster industry to continue as a new generation, and to conserve the magnificent right whale. That is what I wanted to say. I think of you as partners and collaborators in all of this, and either Sam or I are happy to entertain comments or questions.

CHAIR McNAMEE: Awesome, thank you so much, Janet. I thought you were going to bust out a Yoda quote. Obi-Wan Kenobi also would have been okay, but Willie Nelson is pretty good. The Assistant Administrator has offered to take a few questions, so open it up to the Board for any questions you might have for Janet. Dan McKiernan, go ahead. MR. DANIEL McKIERNAN: Thank you, and welcome, Janet. We got a six-year reprieve, and I totally agree with your perspective that we really need to get working on getting to a place where we have enough information and refinement, so that in 2028 we can have a different management scheme. But I just want NMFS to also understand that we've done something in the last couple of years that is new and novel, that is weak rope and marked rope.

I know there are three new entanglements that have come up since the infamous Omnibus. But I hope that we can really work, or that your staff will really work with us as states, because you've basically asked each of our states to be responsible for entanglements, be responsible for the marked gear.

We're ready to look at that gear, because if it is our state's gear, it is going to go a long way to convincing those that are involved in the fishery that we need to make those changes. We're really anxious to see the gear, particularly that new whale that came entangled and has been disentangled off North Carolina.

We're really anxious to see that, and we hope that the NOAA folks will work with us, and that we can mine into the new information, so that when we get to 2028, we can be more surgical, because even the ropeless road map states clearly that ropeless probably isn't needed everywhere. That's like the biggest challenge that we have on the waterfront is, you know a guy with a small open boat is looking at this saying, is this the end of my participation in the fishery?

It's like, well, not really, look at the ropeless road map. Anyway, so I hope that NOAA will try to use this interim period to gather the vetting information that we've been lacking. I know in the past it's well, 70, or 80 or 90 percent of the entanglements, you don't know where they came from. Well now we should, because of those two features. I hope that we'll work together to gather better evidence.

MS. COIT: Thanks, Dan, excellent points. We've all seen in several entanglements, as you've said, and

we were able to collect the gear from that last one. Determining whose gear, it is, where the gear is from is important. I won't restate your other points; I think they were all very good.

I think you all know, Colleen is going to speak next, I believe, that we're doing the Peer Review shortly of the Decision Support Tool. Actually, it might be underway. But I think one of the things that this, to quote you, "reprieve" that's your word, allows us to do is gather more information and then you input that information into that tool, among others. Thank you.

CHAIR McNAMEE: Discussion, go ahead, Pat.

MR. KELIHER: Thank you, Mr. Chairman, thank you, Janet, for those remarks. I agree there is a lot of work to do. We have heard people in Maine, industry members, talk about this as a six-year pause or reprieve, we don't have to do anything. That is certainly not the intent of the state of Maine.

We have four years to collect data, and so I want to make sure, you know just our focus is going to be on issues around gear. We know ropeless, but to Dan's point. You know ropeless shouldn't be needed everywhere, but we do need a ropeless system that works. That dynamic type of approach is also going to be important that you spoke of.

One hundred percent harvest reporting, trackers, there is a lot of data that we're going to have now that we did not have in the past, which I think is going to be instrumental on maybe seeing that we're in a different place, hopefully in four years when this rulemaking starts. But we're also not blind to the fact that big changes are coming.

We all recognize that, and so we do want to work together. The one thing I do want to bring up that I didn't hear you mention directly is, kind of tracking and the acoustical work that needs to be done. The state of Maine, and I think others, are looking at the ways that we can expand our footprint within the Gulf of Maine or within the range of right whales.

Using passive acoustics, we think it's going to be a critical tool to understand where they are, how they're behaving in those particular areas. But the Coast Guard and BOEM got a lot of money for passive acoustics too, so I would just urge the Agency to bring your parties together on passive acoustics, to make sure that we're not duplicating efforts in areas. I think that is going to be really important. There is a lot of money there, and I think if we use it wisely it will give us a lot of information to benefit right whales. Thank you very much.

MS. COIT: Thank you, Pat. We are meeting with the other agencies, and agree that's another set of coordination that needs to happen, so we can cover more ground. Improving monitoring is key to both your and Dan's comments, and we're committed to that. As you well know, Senator King is encouraging us to work more on satellite monitoring, and that is something that has promise, though perhaps not in the near term.

CHAIR McNAMEE: Representative Peake.

REPRESENTATIVE SARAH PEAKE: Thank you very much, Madam Administrator, nice to see you and nice to meet you here today, appreciate that and your comments. I would just like to offer a comment relative to climate change and the effects that that is having with ocean acidification as it may affect food sources for various species, and of course the warming of our waters.

I feel like having served on, as the Legislative Commissioner, I think since 2009 on this Board, I've had a front row seat to witness climate change. When I go out and meet with constituents I say, you know we never really used to care about black sea bass, now we have a fishery in Massachusetts. The gentlemen all sitting across the table from us, are seeing a fishery of black sea bass also. But getting back to the North Atlantic right whale. I think that climate change must be given equal weight or more

to what our management plan might be, whether it's ropeless fishing. I think the gear marking that Dan talked about is important.

But we have North Atlantic right whales right now in Cape Cod Bay that are visible from Herring Cove Beach in my district. There is a concern with that, because their food source is not webbed in Cape Cod Bay, but those right whales are in Cape Cod Bay, and obviously that affects their very viability, their strength, their ability to feed, and to nurse whatever calves that may be with them.

Although it may not be universally popular around this table, I believe that the efforts of Massachusetts, specifically, moving boldly forward with deep water offshore wind, to remove the carbonization out of the energy grid, in effect, is a critical and important thing for us to look at and continue to support.

As we're balancing potential effects of offshore wind projects, let's keep in mind that, I think you talked about moving quickly, that that is the swiftest way that we are going to meet our carbon reduction goals that we need to, in order to slow the warming of this planet that we live on, and this giant ecosystem that includes human beings and the North Atlantic right whale. Thank you.

MS. COIT: Thank you very much for those comments. Sam has corrected me that the comment period is closed for the Vessel Speed Rule, so I just wanted to correct the record on that. Jason, we closed October 31st.

CHAIR McNAMEE: All right, good discussion. Thanks for that update. Any remaining questions, comments for Janet? Anyone online raising their hand? Okay, I think that will do it then. Janet, I know you can't stick with us, but thank you so much. Really appreciate you taking the time to address the Board. Great to see you. MS. COIT: Thank you, and if you ever want to talk about black sea bass, Representative, talk to Jason.

REVIEW REPORT FROM THE ATLANTIC LARGE WHALE TAKE REDUCTION TEAM AND PROGRESS ON ATLANTIC LARGE WHALE TAKE REDUCTION PLAN

CHAIR McNAMEE: All right, on to our next agenda item. We are going to get a Review Report from the Atlantic Large Whale Take Reduction Team and Progress on Atlantic Large Whale Take Reduction Plan from Colleen Coogan and Marissa Trego. I'm sorry if I mispronounced that.

MS. MARISSA TREGO: That was correct. This is Marissa Trego; I'm going to be giving the presentation for the most part, but Colleen is also on, and will be available for questions as well. I am going to give you guys a summary of the results of our meeting, meetings that we held in November and December of last year.

I'll just note that this is a draft meeting summary, since they key outcomes isn't final yet, and we haven't found team feedback just yet. I'll be talking a little bit about that as well as our next steps. Just a short overview of what I'll be talking about. First, I'll talk about what the charges to the Atlantic Large Whale Take Reduction Team, what the Risk Reduction measures were that we discussed at our meeting, the overview of that package that the team pulled together and voted on at the end.

I'll give you a little preliminary interpretation of the Consolidated Appropriations Act, though Janet already went into that in a little more detail. Then finally, I think we do have some information on large whale strandings that I'll kick off to Colleen, if that is of interest. The Atlantic Large Whale Take Reduction Plan was created at the end of the nineties.

NMFS is mandated by law to create a Tier T when incidental mortality and serious injury in U.S. Commercial fisheries exceeds PBR. This Atlantic Large Whale Take Reduction Plan was implemented primarily to look at mortality of right, humpback

and fin whales, and make sure to get those mortality levels below that potential biological removal level.

It's largely focused on right whales, since the population is very small, and the mortality is much higher than PBR. The goal of the team is to develop recommended measures to reduce that mortality and serious injuries. It's a consensus-based process, and the team is comprised of 60 members, which includes 23 fishermen, as well as stakeholders from states, fishery management organizations, NGOs and academics.

Ultimately, while we get recommendations from the Team, NMFS is responsible for taking action in the end. There are several fisheries that are covered under the Atlantic Large Whale Take Reduction Plan. I won't go over all this in detail, but the PBS will be available if you want to look at all the details.

In general, it's mostly trap pot fisheries along the east coast, as well as several gillnet fisheries, including sink gillnet, drift gillnet and sharks, for example. In 2022 the charge to the Take Reduction Team was to create recommendations to us, to reduce mortality and serious injuries of right whales in U.S. commercial fisheries to a level below that population's potential biological removal level, which for this population is really low at 0.7 whales per year.

We estimated that this would require about an 88 to 93 percent total risk reduction, which is at 41 to 46 percent additional risk reduction on top of the September 2021 Final Rule that modified the Northeast lobster and Jonah crab fisheries. There are several recommended measures that were brought to a vote, and these were among three different categories.

Largely, closure to buoy lines, so either moving or removing lines in a particular area seasonally. Line reductions including things like trap caps, line caps, trawl ups, and using only one buoy line for a trawl, and weak rope, which is using a 1700-pound maximum breaking strength, for example.

Then there are a lot of implementation challenges that were discussed throughout the meeting, including things like economic concerns, the affordability and readiness of on-demand gear, things like gear conflict and enforcement, some equity concerns for things like trap caps, as well as safety. There are a lot of things that we discussed in relation to these that kind of determine where these types of measures might be most useful and least concerning, in terms of their implementation. I'm just going to go through a list of the different areas and trap pots and gillnet Package Elements, so you can know what was put for a vote at the end of our TRT meeting. First, I'm going to focus on the trap pot elements that were discussed by the team.

In LMA 1, different trap pot closures were suggested that got at really key areas of overlap between the lines and whales. Those included closure in Maine Zone A from June and July, and expansion of the LMA 1 restricted area slightly, and then additional closures around Jeffrey's Ledge, and as well as other areas close to the Massachusetts Restricted Area that would expand into high cooccurrence habitats in that region.

In terms of line reduction, there were several options that people discussed, including things like a 400-trap limit in certain Maine areas and Jeffrey's Ledge, where there is a lot of concern for reducing the amount of gear in that area, without using closures. There is also a line cap that was discussed that was seasonal that would occur in Jeffrey's Ledge and then some other trawl length-base scenarios in Massachusetts.

In terms of weak rope, that was something that was widely discussed throughout the region. That would vary by distance from shore. Taking into account some of those implementation concerns I touched on earlier, where in deeper water there is more of a concern for using weak rope, and so there is a lighter use of weak rope in offshore

versus onshore, where weak rope in this package was a little more heavy.

In Outer Cape Cod this was a pretty low risk area already, given the closure of the Massachusetts Restricted Area. But there was a suggestion to expand that closure in Outer Cape Cod a little bit in space and time, so all federal waters and going into January, as well as to May 15. There was also a trawl length suggestion to reduce line reduction in December, which is a higher critical month without closing that area, and using 100 percent weak rope.

In Southern New England, which we know is a critical area as well, and has been more frequented by right whales recently. There were a lot of suggestions to have large seasonal closures to buoy lines in this area, including the entire LMA 2, as well as a 2/3 overlap between January 15 through April 30.

This was really the most effective way to remove lines from the water, rather than moving it into new areas that would create other areas of risk. In this area in particular, moving gear just created more risk. Some way to remove that risk was the most affective. Other line reduction options looked at trawl length, based on latitude, and 100 percent weak rope again to have lower chances of creating serious entanglement, should one occur.

In Lobster Management Area 3, we had some proposals. This group in particular did not necessarily propose all of these items. We took a few elements from this group, but largely the package that we pulled together didn't quite get to the risk reductions. We were asked to show an example of what did get to the risk reduction that might be needed. Several of these were proposed by NMFS as well, to kind of make up for that gap. These blue line closures look fairly large, and that's because it's really hard to remove line from the water in this area in particular. That would include some really large closures in the purple area during the summer months, and in Southern New England during the spring months that line up with the Southern New England closures I just mentioned, as well as an extension of the LMA 1 restricted area that I noted on a few slides earlier.

For line reduction, some of the ideas that were put forth were line caps. The example in the package that was voted on included a 45-line cap for lobster, and also removed one end line in areas north of the Canyon year-round, and seasonally south of the 100-fathom line in the Mid-Atlantic.

There was also a weak rope suggestion just in the top 33 percent, given those concerns we have about implementation of weak rope in deeper water. For Lobster Management Areas 4 and 5 in the Mid-Atlantic there was a suggestion to have a minimum trawling for lobster and black sea bass of 20 traps per trawl in certain areas.

Then one end line as well in some of those fisheries in Delaware, Maryland and Virginia, and in this area another thing that was of interest is 100 percent weak rope to reduce the lethality of those lines. I'll just move on to the gillnet package elements, there is just a few of them. I'm just going to go over these combined.

Gillnet is also one of the fisheries that was lower in terms of risk reduction, but we were able to get really decent risk reduction from some of these closures, in areas where most important, which was in Gulf of Maine and Southern New England. There was a closure proposed west of 70 degrees and north of 42.5 degrees in orange, during springtime.

This was pretty effective at reducing risk of the gillnet fishery in this region. That was the area of most risk where gillnet fishing was occurring. Then the Southern New England there is a suggestion to apply that South Islands Restricted Area that is already implemented for trap pot to gillnet in this critical area.

A few other options for gillnet was brought to line reduction through use of an end line cap in the Gulf of Maine and Southern New England, and the use of

one buoy line in the Mid-Atlantic in certain fisheries from New York to Virginia. In terms of weak rope, this looked a little bit different by region.

In the Gulf of Maine there was a suggestion to use weak rope based on depth, to account for different gear weights. In other areas they chose to go with more of a hundred percent weak rope that kind of was a mix of full manufactured weak rope and weak at the bottom. At the end of these meetings, on December 2, the Team was able to vote on this final package, and we had a mix of responses.

Seventy percent supported the package, 45 percent supported it with reservation, 32 percent could not support it and opposed it, and we had 16 percent abstain. You can see on the right this is the representatives, the caucuses that were represented in those votes. We had fishery managers throughout each of those votes. We had some support from industry and some opposition from industry, and the NGOs did not support or abstain, largely, and we had a few academics on either side as well. Some of the areas of general support that we did hear was that there wasn't a lot of strong opposition to a lot of the gillnet measures that were discussed, nor was there as much opposition to measures in the Mid-Atlantic and Southeast for both gear types. We had some mixed support for some of the package measures.

NGOs and academics largely didn't support the use of weak rope as much as was relied upon in those packages. Then they also had an interest in really supporting measures, but showed progress toward ropeless, and there was a statement of support for some deadlines using these that didn't quite achieve consensus.

There are a few other things that were discussed that didn't go in the ultimate package but did get some mixed support from the team as well, which is including the increased value of the Massachusetts restricted area in the total risk reduction package, and a dynamic closure proposal for Maine's Zone A, which also didn't end up in the final package.

One of the main concerns we heard from people about the rope was that LMA 3 requested to accept the package proposal that went to vote as interim, until AOLA submitted their own proposal of equal value in January. But as Janet mentioned, the Consolidated Appropriations Act was passed in December, which changed a little bit of the next steps that we have.

Our previous charge was, according to the court mandated deadlines, and for now I kind of want to go over what that, given all of the information we got from the TRT meeting, what that means in terms of next steps for TRT plans. We still got a lot of really helpful information from those meetings that we will use to inform all of the rules that we work on moving forward. It will just be at kind of a different pace.

As she mentioned, there is a lot of research that will be invested in, especially efforts to advance ropeless gear and other technological solutions, especially given some of those closure areas that you saw. They are really large areas, and things like ropeless can circumvent that and really be a solution that allows people to keep fishing during those closures.

That sort of development is also really essential to some of those other ideas, including fishing with one buoy line. Certain areas like gillnet and other trap pots, we discussed the idea of using ropeless on one end. That is something that we would really need to develop if we were to implement that for other fisheries like gillnet and other trap pot.

There is additional money that will likely go into things like prioritizing surveys and other data collection that will really inform all of the models for our decision making. That will hopefully be a really important tool as we move forward, developing our world of the future. In terms of rulemaking, we will be closing that wedge area that

is circumscribed by the Massachusetts restricted area.

That will be effective as of February 1st, and run April 30th, in line with the through Massachusetts restricted area in federal waters. We'll also be moving forward with reducing risk in Atlantic gillnet and mixed species trap pot fisheries, similar to what we used to haul our Phase 2 efforts. We'll use all of that information we got from the TRT to inform that rule moving forward on those other fisheries. We'll obviously be working really closely with the Councils and Commission to explore those options to use things other than buoys as gear marking schemes, which is really important for advancing that ropeless technology. The goal will be to have a rule effective by 12/31/28 that reduces risk within the lobster and Jonah crab fisheries in line with that Consolidated Appropriations Act deadline.

We would propose regulations earlier than that, and aim to have something effective by the end of 2028. Though this isn't necessarily TRT related, it's associated, and we just wanted to give a short update on some of the entanglement incidents we've had this month, since there have been quite a few.

One of these in red you will see is a resighted entanglement. This is an entanglement that we were aware about that was first sighted in Canadian waters. These other ones are new entanglements. The one on January 8th,to the 20th, and the 27th, are new entanglements. The first up there is a 4-year-old female, had previously been seen with no gear in May, 2022.

It is a serious injury and has not been resighted. The last two, we were able to get some gear from these. Both were, so I guess the January 20th Nimbus was sighted without entanglement as of August, 2022, in the Gulf of St. Lawrence, and Argos was last seen without an entanglement in May 2022 in the Great South Channel. Both of these last two we were able to get some gear. Some gear analysis is underway. There is a transboundary gear analysis process that will last at least 45 days before we can release anything about that information. But once that analysis is complete, we'll notify the TRT and let them know what the results of that are.

It's really helpful when we are able to get that gear in here. That is about it, and I'll open it to questions, unless there is anything else Colleen wants to add. Oh, she did note that it's up to 45 days, so we won't necessarily take 45 days for the transboundary gear analysis. It may be sooner.

CHAIR McNAMEE: Okay, thank you very much, Marissa. Are there questions for Marissa or Colleen from the Board? We have one online, David Borden, go ahead. We can't hear you, David, if you're talking. Sorry, David, we're not hearing you. It looks like you're unmuted, so hopefully we can come back to David once we get that squared away. But I saw another hand, so I'll go to you, Dan. Go ahead.

MR. McKIERNAN: Could I just get clarification on the transboundary gear analysis. Is that a new agreement with U.S. and Canada to share the gear information? It's new to me.

MS. COLLEEN COOGAN: I'll jump in here, Marissa. Hey, Dan, this is Colleen. We have been working with them really over the last few years. We don't have a strict agreement with them. The 45 days is our typical gear investigation time period. We try and get a report out, at least a preliminary report within 45 days. We are in the case of these last two events, working as well with Canada, because so much of the gear retrieved over the last five or six years has been Canadian. We have told them that we'll be releasing results within 45 days. It's not so much that it's a 45-day process with them, we do look at the gear. We do look at it with them, and we ask them to do the same when there is an entanglement in Canadian waters. It's an informal agreement not a formalized one.

CHAIR McNAMEE: Thanks for that, it looks like Dan is satisfied with that. Let's try David again. Go ahead, David, if you're able to, or if we're able to hear you. Go ahead, Toni.

MS. TONI KERNS: Jason, David has texted me his question. Colleen, he's wondering, or Marissa, I'm not sure who it's to. But the last entanglement where you actually retrieved the gear, where was it from?

MS. COOGAN: We have not finished the gear investigations on the last two entanglements that we retrieved gear from this month.

CHAIR McNAMEE: Okay, Toni can keep her eye on her text if Dave has a follow up there. Nothing so far.

MS. COOGAN: Just to clarify a little bit, we actually don't even have that gear in our gear warehouse yet. While we've done some remote review, and the folks that did retrieve it have looked at it. Again, we haven't done our formal gear analysis yet.

CHAIR McNAMEE: Thank you for that. We have Beth Casoni on line, go ahead, Beth.

MS. BETH CASONI: Beth Casoni, Executive Director, Massachusetts Lobsterman's Association. I would like to put this on the record that we feel that the emergency action taken to close the wedge outside of the month of April, is in violation of the language in the Omnibus Spending Bill. You know I'm getting emails from our members, and they are not seeing any whales up there now, and they have 500, 600 traps up there. I am aghast.

You know Massachusetts is lightyears ahead for right whale conservation, and to take this two months away from the industry, when the language was clear, it was for existing emergency action. The month of April was last year, and now our industry is facing February, March, April. We just want it on the record that we think it's a violation and we don't support this. Thank you.

CHAIR McNAMEE: Thanks, Beth, Colleen or Marissa, any response?

MS. TREGO: There wasn't a question in that. I will say that the most recent aerial survey conducted by the Center for Coastal Studies did identify 16 right whales. I think it was done yesterday in the Cape Cod Bay area. Also, we understand there may still be gear there, and as always, our enforcement will be working closely with the Mass Environmental Police to support compliance while gear is removed from the area.

CHAIR McNAMEE: Thank you for that. Any remaining questions from the Board? Ray, go ahead, Ray.

MR. RAYMOND W. KANE: Question. I heard this conversation that they had retrieved gear, a rope type. But it's not in the warehouse, so who maintains custody of the gear and the rope type if it's not at the warehouse? Who has got it right now? Where is it?

MS. COOGAN: That gear, I think one of those was disentangled off of Georgia, the other off of North Carolina. I believe that the Georgia DNR folks that we work closely with, and that were involved in both of those disentanglements, are working with enforcement to maintain a chain of custody and transfer the gear to the warehouse.

CHAIR McNAMEE: Okay, got a thumbs up from Ray. Any final questions from the Board before we move on to our next agenda item? I don't see anyone online. No one around the table, so Colleen and Marissa, thank you both very much, appreciate the information and your response to those questions. Thank you very much.

MS. TREGO: Thank you for the time.

CHAIR McNAMEE: You're more than welcome.

CONSIDER DRAFT ADDENDUM XXVII ON INCREASING PROTECTION OF SPAWNING STOCK BIOMASS OF THE GULF OF MAINE/GEORGES BANK STOCK.

CHAIR McNAMEE Moving on to our next item, this is our action item for the day, so we are going to now Consider Draft Addendum XXVII on Increasing Protection of Spawning Stock Biomass of the Gulf of Maine/Georges Bank Stock. The goal here is to decide if we want to send this document out for public comment.

We've been working on this for a while. You know I think we can make some small adjustments today without delaying further. If the adjustments are more significant, we'll have to think that through a little bit. With that, I am going to turn it over to Caitlin to give us a quick blast through the Addendum, and we'll meet back on the other side.

MS. CAITLIN STARKS: I'm going to go over Draft Addendum XXVII. This is again on increasing protection of the spawning stock in the Gulf of Maine and Georges Bank stock, and the PDT has revised this document since the last meeting per the Board's request. I'll go over those changes.

I'm going to start off with some very brief background on the Addendum Action Timeline, then I'll review the proposed management options in the document, and provide a quick update on the discussion related to the Magnuson-Stevens Act implications for changing the minimum gear size. Then I'll wrap up with next steps and a tentative timeline for the Board. We've covered the full history of this action over the last few meetings.

But I just want to remind the Board of the more recent changes to the Addendum. The objective that is here on the slide is ultimately what the Board provided for the focus of the document, after receiving the results of the 2020 stock assessment, and acknowledging the continued low indices in the settlement surveys, and declines in recruit abundance in the ventless trap survey and trawl surveys for the Gulf of Maine and Georges Bank stock.

The objective is to increase the overall protection of spawning stock biomass of the Gulf of Maine/Georges Bank stock by establishing a trigger mechanism, whereupon reaching the trigger management measures would be automatically implemented. That is our focus, and then for the timeline, this is what we had done so far, and where we're going. We started off with the re-initiation of work on this Addendum XXVII in February, 2021, and then in January 2022, the Board approved the Draft Addendum for public comment. However, at that same meeting the Policy Board chose to delay the release of the document for public comment, to allow some time for upcoming actions and information to potentially better inform the public comment on this Addendum.

Then at the last meeting of the Board in November, 2022, it reevaluated the Addendum and decided to rescind the documents approval for public comment, in order to make some changes to the proposed management options. Today the Board will be considering the modified draft addendum document for public comment.

These are the motions that were passed at the November meeting, just as a reminder, which directed the PDT to make some changes to the Draft Addendum XXVII document. First the Board asked to simplify Section 3.2 by creating a single trigger level, rather than multiple triggers that would act as a backstop to protect the stock from further declines.

Specifically, the Board asked for the trigger to fall between the range of 30 to 45 percent decline in the index from the reference period. Then additionally, the Board asked to change Option E to shift those years in which the scheduled changes to gauge and vent sizes would occur to 2025 and 2027, rather than 2023 and 2025.

I'll go over the proposed management options in the document that have been modified. First, the

proposed options in the Addendum are still separated into two issues, with Issue 1 addressing the standardization of a subset of management measures within LCMAs and across the Gulf of Maine and Georges Bank stock.

Then Issue 2 considers either a trigger mechanism or a predetermined schedule to implement the biological management measures that would be expected to provide increased protection to the spawning stock biomass. Since the last meeting the options under Issue 1 have not changed. But just for a quick recap of these.

The two main options are A, status quo, or B implementing some standardized measures upon approval of this Addendum. Under the Option B, there are 4 sub-options that define what those standardized measures would include. B1 is standardizing measures only within LCMAs where there are current discrepancies.

B2 is standardizing the v-notch requirement across the LCMAs. B3 is to standardize the vnotch possession definition across the LCMAs, and B4 is to standardize the regulations for issuing additional trap tags for trap losses. I guess I didn't move forward on that last one, but just as a quick note from this list of suboptions. The Board, as an option, could select as many of those sub-options as desired.

All right, so that Issue 2 focuses on implementing the management measures to increase protection of the spawning stock biomass, specifically using changes to the minimum and maximum gauge sizes, along with corresponding vent sizes for the LCMAs within a stock that are expected to increase the spawning stock biomass, and also increase the minimum gauge size, to meet or exceed the size at 50 percent maturity for each LCMA. Each option the vent sizes would change according to the final minimum gauge size that is implemented in a specific area. Then for the way that these options are set up, there are two approaches.

The first is using this trigger mechanism, and that would result in a predetermined set of management measures being triggered upon reaching a defined trigger level, based on changes in recruit abundance indices. The second approach is using a predetermined schedule for future changes to the management measures. These are the five options that are under Issue 2, and these are modified based on the Board motions in November.

A, status quo, no additional changes to the management measures. B is that the gauge size changes would be triggered by a 32 percent decline in the trigger index. C is that gauge size changes would be triggered by 45 percent decline in the trigger index, and then D is a 32 percent decline in the index, triggering a series of gradual changes in gauge sizes over several year.

Option E is the scheduled changes to minimum gauge sizes, and as a note, Option E only has changes to the minimum gauge size in LCMA 1, happening on a predetermined schedule. These are the proposed measures for Option B that would be implemented when the trigger level is reached. Again, this is a trigger at a 32 percent decline in the index.

First, I want to make a note about why the PDT chose to use this 32 percent as the low end of the trigger range, although the November Board motion said a range of 30 to 45 percent. The reason is that when the TC was originally proposing a range of possible trigger levels to the PDT to include in the Addendum, 32 percent was one of the proposed trigger levels, because it's approximating a decline in reference abundance, so the level where the stock abundance regime from the stock assessment shifted from moderate to high abundance.

The PDT thought this was a more justified option than the 30 percent, because the 30 percent number was an arbitrary number that was thrown out as an additional trigger level by the Board after

the 32 percent had already been proposed. Under this option, when the trigger index shows a 32 percent decline from the reference period, then the minimum gauge size for LCMA 1 would increase to 3 and 3/8 of an inch for the following fishing year.

In addition, the maximum gauge sizes in LCMAs 3 and Outer Cape Cod would decrease to 6 inches. The vent size in LCMA 1 would be adjusted once as well, to 2 x 5-3/4 of an inch rectangular, and 2 and 5/8 of an inch circular. These final vent sizes were chosen to maintain similar retention rates of the legal-size lobsters, and protection of sublegal sizes.

They are also consistent with the current vent size that is used in Southern New England for the same minimum gauge size of 3 and 3/8 of an inch. For Option C, the management measures are identical to what is in Option B. The only difference is the trigger level. This trigger level is a 45 percent decline in the index.

That would trigger the same exact management measures that I just described for Option B. The 45 percent trigger level is approximating a decline in stock abundance to the 75th percentile of lobster abundance during a moderate abundance regime from the stock assessment. Since the document includes these two alternative trigger level options with 32 and 45 percent, that means the Board would establish a single trigger at final action, and that could fall anywhere within that range.

For Option D, this is the one that considers implementing a series of gradual changes in gauge sizes that would be triggered by a 32 percent decline in the trigger index. Only at that fifth level the 32 percent, that could also be changed at final action to fall within the range of 32 percent to 45 percent as provided in Options B and C.

With this option, when the trigger level is reached, the minimum gauge size would increase in increments of 1/16 of an inch, and

the maximum gauge size would decrease in increments of 1/4 inch, with changes occurring every other year. If the trigger level is reached in Year 0, then the first gauge change would occur for Year 1, and that's what is shown in the first row of changes.

Then the second change would occur in Year 3, and the final change in Year 5, and that's shown in the last row. Similar to the other options, the vent size in LCMA 1 would be adjusted once to correspond with the final minimum gauge size change in Year 5. Then the last option is E, and instead of using the trigger mechanism, this option would establish a schedule for changing the minimum gauge size and vent sizes in LCMA 1.

That choice was put in by the PDT To provide an option that only focused on LCMA 1, because proportionately the amount of impact that changing the minimum gauge size in LCMA 1 has is larger than in LCMAs 3 and Outer Cape Cod, in terms of positive impact on the spawning stock biomass.

As a reminder, this first step would increase the minimum gauge size in LCMA 1 to 3 and 5/16 of an inch for the 2025 fishing year, and then two years later for the 2027 fishing year, the final adjustment would be an increase in the minimum gauge size in LMA 1 to 3 and 3/8 of an inch. At that time the vent size in LMA 1 would also change corresponding to that final gauge size.

Again, all of the other measures for LMA 3 and Outer Cape Cod would stay status quo as written. This is where we are with the trigger index. This is calculated through 2021 with the available data. The top left panel shows the combined index, which is what would be used to determine when the trigger level is reached. Then each of the other surveys, their indices that go into this combined index are shown individually in the other panel.

Then the two horizontal lines in each box represent the proposed trigger levels of a 32 percent decline and a 45 percent decline. At the last meeting, just want to give a quick update on the MSA issue that we discussed. The Board discussed this concern

that the minimum size being proposed for LMA 1 in the Addendum.

There are some implications that it could have for commerce, given the language in the Magnuson-Stevens Act. But since the last meeting, staff has spoken with NOAA Counsel, and determined that this Addendum will not have an effect on the legal minimum size in effect or enforced. While the Addendum proposes a gauge size change for Area 1 that is larger than 3 and a quarter inch, the Commission's FMP still maintains a 3 and 1/4 inch coastwide minimum size. That would act as a baseline that no LMA can go below, and because that is still in the FMP with the lobster that would be imported from Canada at 3 and 1/4 inch would still be allowed, if this Addendum is adopted. That is the guidance that we've received and that has been modified in the document as well.

With that the next steps for the Board for today are to consider approving Draft Addendum XXVII for public comment. If desired, of course, the Board could make any simple changes to the document before releasing it. Significant changes would potentially delay our timeline. If the Board approves the Addendum for public comment today, we would be able to work on publishing it and getting the hearing schedules over the next few weeks

Those hearing would probably be able to occur in late February or early March. Then we could hold an Advisory Panel meeting to review public input on the document in March or April, and then the Board could consider final action on this Addendum in May. I'm happy to take any questions on that.

CHAIR McNAMEE: Awesome, thank you, Caitlin, great job getting through all that. Let's start with any clarifying questions folks might have for Caitlin. Looking to the Board, folks around the table first. I see Dan, go ahead.

MR. McKIERNAN: I guess this would be a Rob O'Reilly style question. I'm concerned, not in the content of the Addendum, but sort of the logical order. I'm wondering if we could endeavor to actually reorder some of these things in a more logical way. What I'm getting at is, I think there ought to be a feature of this Addendum where it says, choose a trigger.

Then when you choose the trigger, then it's like, okay under this trigger you either do it right away, or you do it in a three-year period. Then like those kinds of sub-options. I just find that the way it's written now, it's with a 32 and a 45 is really difficult to follow, because we're going to choose one trigger. I'm just wondering, and I would be happy to dedicate my time to working with Caitlin to maybe reorder this. Is this ringing true with anybody else, in terms of how it is structured?

CHAIR McNAMEE: Go ahead, Caitlin.

MS. STARKS: I am sure we can make that change. I don't think it would be too complicated to rewrite it so that there is one issue that specifically addresses the trigger level, and then a sub-issue that addresses the management options, and how they change when that trigger is hit.

MR. McKIERNAN: Right, sub-options, in other words. You would choose one of the two, for example in that case. Yes, I'm not taking issue with any of the content. I just would wonder if it would be easier for the public to digest it in that fashion.

CHAIR McNAMEE: Thanks, Dan, good suggestion. It's just sort of working what is already there, so not a significant change necessarily. I will work around the table really quick, to see if other folks think that is a kind of logical way to sort of do this. It sounds intuitive to me, but wondering if anyone else feels differently. Adam.

MR. ADAM NOWALSKI: I'll just ask if we're going to start by choosing a management trigger, how would that impact Option D here, because Option D is written, I believe it's just for one of those two triggers, not both. I can understand how choosing

on or the other would flow with B and C, but then how would that impact D, if you wound up choosing the 45 percent trigger, which the Option D is silent on?

MS. STARKS: I would just have to restructure the whole document so that there is a trigger level option that is either 32 or 45 percent, and then besides that there are two options, really for the management measures. Either it's one and done, it all changes at once, or if it's like Option D, where there is a series of gradual changes that occur when that trigger is hit. Then Option E would remain as a separate option.

CHAIR McNAMEE: Go ahead, Adam.

MR. NOWALSKI: Just for clarity, we would include gradual changes for the 45 percent trigger, which this document doesn't currently contemplate, or are we saying only the 32 percent trigger is going to have the gradual changes?

MS. STARKS: I think that is a decision of the Board today. If the intent is to allow for the potential to have a 45 percent decline trigger level, that then triggers gradual changes in measures, then I can make that happen. But if the Board does not want that to happen, does not want to allow that to be an option, then I can structure it that way.

CHAIR McNAMEE: I'll ask a question in follow up, and that is if we, so all of those things exist, right in the document now, it kind of changes one of the elements. Would we consider that significant, or is that something that we can do and still get this document out?

MS. STARKS: I believe that there is clear agreement from the Board today, then I can make those changes before really seeing the document without needing to come back to the Board.

CHAIR McNAMEE: Excellent. Thank you very much. Steve.

MR. STEPHEN TRAIN: Coming off of Adam's thing, how are we going to do this in stages if we hit 45 percent, and we're talking about how we may have to do something else? If we're at 45 percent and then we start talking about slowing what we're doing down, we're not doing this industry any favors. I would hate to see that happen. I can't speak for the whole Board. You said if it's a decision of the Board we can put it in steps, but if we get that far and then we delay what we're doing and do it in stages, we might as well not be here.

CHAIR McNAMEE: Thanks, Steve, appreciate that. Other questions, and I think we can then switch to actual deliberations. Pat, go ahead.

MR. KELIHER: I think this is in keeping with the question that Dan asked, or the type of question that Dan asked, because it's about the makeup of the document itself. I've had a chance to talk to staff about this. I think the rationale within the introduction is really good, but I think there could be some strengthening of that rationale.

Maybe with the use of some of the tables within the document, especially showing the trends of both young of the year and trawl survey data, where we're seeing that trend now, since we're past the assessment data. I think that would be beneficial for the document. I think also, adding where we are with the current reductions within a statement within the introduction, so people understand we're already in that decline, and it's already equal to around 23 percent.

CHAIR McNAMEE: The suggestion here is to just bolster, not change anything, but just bolster the kind of informational lead-in to the Addendum. Caitlin, comments on that?

MS. STARKS: Yes, I think that is something I can easily do. There is already information to what Pat Keliher was asking for in the document, but it's in the appendix that includes the data update from this past year, so I can pull information directly from

that into the introduction, just to show the most recent trends.

CHAIR McNAMEE: Good, follow up, Pat.

MR. KELIHER: Yes, just a couple more points. Throughout the document we used the term fishing year, but I think we need to define fishing year. That could either be done by receiving comments through the public process, and then defining what the fishing year is at final action or defining it now. I don't' know about the rest of the Board, but the idea of doing these changes on June 1st, versus January 1st, I think January 1st is probably a more logical time. I would be happy to define it now or happy to do it at a later date.

Just while I have the floor, the Magnuson issues that were raised, I think I get it. I think it's clear. But the Magnuson piece is footnoted on Page 8, and I'm wondering if there should be a little bit more clarity around that. Because this is where a lot of consternation is coming from dealers. I wonder if we could just add some clarity, by bringing that out of the footnote and putting it into the main part of the document.

CHAIR McNAMEE: Thanks, Pat, I think the fishing year comment, just being more explicit on, I get confused all the time as to what we're talking about, so I think that's a great idea. It doesn't substantively change the document. The second thing, I'm kind of looking either at Caitlin or Toni.

MS. KERNS: I think we can take the language from the footnote and just put it into the paragraph, if that works for you, Pat. Okay.

MR. KELIHER: I think that works fine.

CHAIR McNAMEE: Dan, go ahead.

MR. McKIERNAN: A question on fishing year. I believe National Marine Fishery Service defines the lobster fishing year as May 1st. Can we get clarification on that?

CHAIR McNAMEE: Clarifying fishing year, we like that idea, and this is exactly why. Jimmy, are you able to respond to that? You're far away.

MR. JAMES BOYLE: Yes, the fishing year for lobster is May 1st through April 30.

MR. McKIERNAN: As a follow up, May 1st works for us, because our state waters fishery, you know most of it's closed until May 1st, May 15th, depending on whale departure. Anyway, I think most of the gauge increases historically have, at least like the Area 2 gauges and stuff and Area 3. I think they have been effective in the spring. I think it's something we should establish in this document.

CHAIR McNAMEE: Back to the concept of the fishing year. I'll take from your comments, Dan, that you would suggest that be defined to start on May 1st, is that what you are driving at there?

MR. McKIERNAN: Yes, but I'm comfortable if I'm outvoted. I just want to introduce that as, A, there is precedent in the federal system, and B, it kind of feels like that's where we've been doing it in the past in other LMAs.

CHAIR McNAMEE: Yes, got it. Pat, a response?

MR. KELIHER: Yes. I appreciate that, Dan, earlier is better. But I'm still not sure I'm 100 percent comfortable with May 1, if we're talking about some of these changes. Maybe the best thing to do is define it at final action.

CHAIR McNAMEE: I'm seeing nodding, but just to make sure it's on the record.

MS. STARKS: Yes, I think when you take final action on this document, under the compliance section we can be very specific about the dates by which things are required to be implemented.

CHAIR McNAMEE: In the short term then, we won't be changing the way it's defined in the document. Is that the idea, we'll wait for final action, or are we going to put something in there?

MS. STARKS: I'm happy to add a sentence that says fishing year will be defined at final action, if that would help.

CHAIR McNAMEE: Okay, seeing nodding around the table, so that sounds good. Any remaining questions before we get down to business here? Pat.

MR. KELIHER: My last one is a bit more substantial, but not so much that I think it would take any additional time here today to resolve. Throughout our options we deal with the maximum gauge in Area 3, in establishing a gauge for outer Cape Cod. I think for the document to be consistent we should add those to Option E. I have a motion prepared, but I'm also happy to just deal with it by consensus, whatever the Chair would like.

CHAIR McNAMEE: Yes, I think giving a motion and then sort of working from that, I think is the way to go there, Pat. Before we go there, I just want one more pass through on questions, and it's pretty long, so it gives people time to take a look. Doug, go ahead.

MR. DOUGLAS E. GROUT: All I want to do is clarify one of the points that was made concerning the fact that we don't have a phasein. Option D looks at things where it only applies to a 32 percent increase. I think I agree with Steve's comment that we should have that option where there is a phased-in only for a 32 percent, as opposed to adding something for a 45. I don't know how the rest of the Board is, but I just want to add my two cents on that.

CHAIR McNAMEE: Okay, thanks, Doug, yes. We sort of brought that up, but that is the first direct comment to it other than Steve's initial comment, so I appreciate that. I do see there is a hand online, Eric, we see you. I will provide some time for the public to offer comments, but I want to get a motion on the Board here before we do that. It doesn't look like there are any more hands at the table, so why don't we get down to it, and Pat you have offered a motion, it is up on the board. Would you like to read through that to get it into the record?

MR. KELIHER: I apologize, because this is a David Pierce type motion, now that I see it actually in big print on the screen. I was trying to make it a little shorter here. I would move to modify Option E by including a 1/4" maximum gauge reduction in LCMA 3 within each annual adjustment, and set a maximum gauge size in the Outer Cape Cod management area of 6-1/2" and include a 1/4" maximum gauge reduction in OCC with each annual adjustment.

In the final year of adjustments, the maximum gauge size in LCMA 3 and Outer Cape Cod would be 6". The vent size in LCMA 1, LCMA 3 and Outer Cape Cod would be adjusted once, at the same time the final gauge size is implemented. The Board during final action will specify the years of the schedule, with the first step occurring no later than 2026, and the second step occurring 2 years later.

CHAIR McNAMEE: Okay, we have the motion on the table from Pat. Is there a second to the motion? It looks like folks are still discussing a little bit. I'm looking for a second. Emerson seconds the motion, thank you, Emerson. Pat, as the maker of the motion, I'll come back to you for first comments.

MR. KELIHER: As I said, I think it's important that we be consistent within each option, and this option was missing those maximum gauge components. I also think there is some benefit to the stock. It was noted within the TC documents. These larger animals are carrying more eggs, they are potentially more robust eggs, and it does provide forever protections for these oversized lobsters that do have a valuable contribution to the resource.

CHAIR McNAMEE: Emerson, anything as the seconder of the motion?

MR. EMERSON C. HASBROUCK: No, I don't support nor do I oppose this motion. I seconded it so that we could debate and discuss it. Thank you.

CHAIR McNAMEE: Thank you, Emerson. We have a motion that is a modification to Option E, and I see a hand up from Dan McKiernan. Go ahead, Dan.

MR. McKIERNAN: I have a question. In the spirit of the operating procedures that have been brought forth by John Clark in previous iterations on other addendums for other species. Would it be acceptable as a final action if we were to adopt that option, but not include Pat Keliher's modification? Are we going to be able to go forward with an Option E as a potential final action, and not include that in that? I just want to know if we have that chance to kind of deviate from the option as written.

CHAIR McNAMEE: Got it, Dan, thank you.

MS. STARKS: I think we just got this at the last meeting. I think there was the intention to be able to combine different aspects of these options. But I think it might be clearer to the public if the option were included. I do think without including this option you could do it. If that were the case, we could just add some language to the document to specifically clarify that the management measures from each option could be mixed and matched.

CHAIR McNAMEE: Just to make sure I understand. The response back is, what is being proposed here by this motion could be adopted. The motion potentially could not pass now, but it could still be adopted at final action. Is that what we just said, Dan? Okay, got it. Adam.

MR. NOWALSKY: Is the desire by the maker of this motion to as this says, modify Option E, so modifying Option E would allow basically for just one Option E to read as it's up here on the board right now, or is the intent here to create this as a second sub-option under E for us to choose from Option E as it exists, or from this version?

CHAIR McNAMEE: Go ahead, Pat.

MR. KELIHER: Well, at the time that I drafted this we weren't talking about having sub-options as we described these changes earlier in the meeting. I'm happy for it to be a sub-option. Really, the only thing I'm looking for is consistency within the document so it's clearer for the public on what they are voting.

At the end of the day, it doesn't mean the Board supports or rejects, it's just putting this out for the public and having clarity, so when they are commenting they know that every option or suboption would include these potential maximum gauge changes in those management areas.

CHAIR McNAMEE: Follow up, Adam? Okay. Doug.

MR. GROUT: The first question I have for the maker of the motion is, you know we had in Option E specific years that the measures would be in. The first one would be 2025, the second would be in 2027. But clearly, you're proposing to have something different in the document. What is the rationale? Why wouldn't we put before the public a specific first year of it and a specific follow up year?

CHAIR McNAMEE: Pat, response.

MR. KELIHER: Thank you for that question, Doug, and I should have been explicit in my justification. I think what I was looking here for is a little bit more flexibility with the Board, knowing that if we make a determination to use this particular option, we have some challenges when it comes to gauges and gauge manufacturing, and it could take some period of time. I didn't want to lock ourselves into a certain year, trying to give us a little bit of flexibility, but saying occurring no later than. I hope that adds some clarity.

CHAIR McNAMEE: Eric Reid.

MR. ERIC REID: I totally understand the intent of this motion, but the sentence that reads in the final years of adjustments the minimum gauge size would be 6 inches, and I don't think that's what you really mean. I would suggest a change that says in the final year of the adjustment the maximum gauge size would be a minimum of 6 inches.

CHAIR McNAMEE: A suggested modification, I believe. I haven't done this one yet. It looks like Pat is in agreement, so officially do we make this a friendly amendment to the original language? I'm like eavesdropping over there, because I knew there would be a good discussion on the parliamentary procedure. It sounds like perhaps the way we should go about this is to actually make it an official amendment. Now what I'm not sure about is, do we need to vote on this first, or can the amendment kind of come in here directly? Okay.

EXECUTIVE DIRECTOR ROBERT E. BEAL: We'll learn about this tomorrow. If this is fixing an error in the motion, which I think it is. I think if everyone around the table is comfortable with that change, then I think it's okay. I was eavesdropping as well on Dennis saying, it's not really Pat's and Emerson's motion at this point.

The Board owns it, and changes should be agreed to by the Board. But I think since this is fixing an error, if everyone around the table is comfortable with it, then I think it's fair to move forward. But you should just ask if there are any concerns about the change.

CHAIR McNAMEE: Okay. I did see nodding as Bob was talking there, but just to be clear. Eric Reid's suggestion is correcting a potential error in your motion, Pat. Do you agree with that?

MR. KELIHER: I completely agree with Mr. Reid's fixing of the error in my motion.

CHAIR McNAMEE: Just to round it out, Emerson, are you okay with that as well?

MR. HASBROUCK: Yes, I'm good with that.

CHAIR McNAMEE: Okay, so it sounds like we can make that modification. I didn't see if the text changed up there. Has it been corrected? Thank you. Great. Further discussion on the motion. Okay, actually I do have virtual hands up. They have since gone down, but I'll check just in case. David Borden, do you have a comment on the motion?

MR. DAVID V. BORDEN: No, I'll pass.

CHAIR McNAMEE: Colleen, did you have a comment on the motion? We're not hearing you, Colleen, if you're speaking. But you did put your hand down.

MS. COLLEEN BOUFFARD: Can you hear me now?

CHAIR McNAMEE: We've got you.

MS. BOUFFARD: Sorry, I couldn't unmute. Eric made my point, thank you.

CHAIR McNAMEE: Excellent, thank you, Colleen. Maybe before we vote, we did have one hand up from the public, so why don't we go to that now, so Eric, I can't quite see the last name there. Eric Lorentzen, go ahead, Eric. You can unmute and make your comment.

MR. ERIC LORENTZEN: I'm a lobsterman from Area 1, Massachusetts in Federal Area 1. I guess my comment looking at this conservation measure. If this or something like this were to go into effect, I would have to change all the vents in my traps, which some traps have three vents, some traps have five vents.

I would alone need 2,400 to 4,000 escape vents to change. Thinking of the manufacturer of these vents. Would they be able to produce enough vents for the entire industry to change them all out? Not to mention the manufacturer. One of my other thoughts was, with all the whale regulations coming down, they also act as though a conservation equivalent for the lobsters, with all the traps being out of the water and things like that.

I just see these changes, because of the stock assessment and things like that, having a huge impact on the industry. It's not something that's going to be easily done, in my eyes as a fisherman. If we're all competing to get new vents for our traps, and we have all these whale rules telling us to get out of the water, which also helps the lobsters, because there is less pressure being put on them and things like that. I just think some of that needs to be taken into account when looking at this adjustment to the industry.

CHAIR McNAMEE: Thank you, Eric. I appreciate the comment, and the manufacturing piece, we talked a little bit out that with gauges. But I think there is time to kind of investigate that question as well before we take final action. I appreciate you kind of putting that on the record so we can check on that before we make the final action on this. Steve, go ahead.

MR. TRAIN: I just want to address part of that. You are only required to change one vent to be legal.

CHAIR McNAMEE: Thank you for that, Steve. Looking around the table I'm not seeing any additional hands. Don't see any additional virtual hands, so I think we are ready to call the question here. I think I can do it this way. I'm not sure how this is going to go, but are there any objections to the motion that is before us? If so, please raise your hand, either virtual or real.

Not seeing any hands around the table and not seeing any hands online, so we will consider this motion approved by consensus. That made a small adjustment to one of the options. Any additional adjustments that anyone wants to make to the document before we approve it for public comment? Yes, go ahead, Caitlin, if you have a clarifying question.

MS. STARKS: I just want to make sure that the Board is all in agreement on the issue of reordering the management option, such that we would have one set of options that specifically chooses the trigger level, and then a second set of options that specifies what the management measure would be and when they're implemented, and then a third option for Option E, which is a scheduled change to management measures.

CHAIR McNAMEE: Okay, there is a nodding around the table, I saw a couple thumbs up. I think we're good. Thanks for that clarification, Caitlin. Okay, one last pass through to see if there are any other modifications requested on the document. Not seeing any, so the final step then is looking for someone to make a motion to approve the document as amended today. I see a hand up from Doug Grout. Go ahead, Doug.

MR. GROUT: I make that motion to approve this document as amended today for public comment.

CHAIR McNAMEE: Okay, we'll take a minute to get that up on the board. The motion up on the board specifies Addendum XXVII. Is that okay, Doug? Great, is there a second to that motion? Seconded by Steve Train. Thank you, Steve. Any discussion on the motion? Doug, I'll give you a first crack at it if you want. Okay, Steve.

MR. TRAIN: Just one thing. We've been working on this a while. We've already had to adjust the date to a fixed date thing because it's taken so long to get out. We actually have a lull in our whale regulations, where this won't be a double impact if it goes through. If this resource is in decline, or continues to go into decline, this is our chance to get something done.

CHAIR McNAMEE: Thanks for that comment, Steve. Any other comments on the motion before we take a vote? Not seeing any hands at the table, not seeing any little green virtual hands either. I'm going to check one thing, hang on one second. I think we can go ahead and call the question at this point.

Are there any objections to the motion that is up on the board before us? Please, raise your hand, whether at the table or online if you object. Not

seeing any hands anywhere, so we will consider this motion approved, which approves the Addendum as modified, which will go out for public comment. Caitlin, any kind of parting thoughts on this before we move on to the next agenda item?

MS. STARKS: I think I have a clarity from the Board to move forward with the changes, without needing to bring it back to the Board. It's not my intention to resend the document out to the Board before publishing it for public comment. I will be reaching out to all the states to schedule public hearings, so please, try to respond as soon as you can to that with your available dates for those hearings.

CHAIR McNAMEE: I'll just emphasizes that point. You know we want to keep this moving so that we can take action in a reasonable amount of time, to Steve Train's comments before. Great, all right, so with that nice job everyone. We got the document out the door. Well done!

UPDATE FROM THE WORKING GROUP ON IMPLEMENTATION OF ADDENDUM XXIX ON ELECTRIC VESSEL TRACKING FOR FEDERAL PERMIT HOLDERS

CHAIR McNAMEE: Let's move on now to our next agenda item, which is an Update from the Working Group on Implementation of Addendum XXIX on Electric Vessel Tracking for Federal Permit Holders, and this won't be Caitlin it will be Toni, so Toni, whenever you're ready.

MS. KERNS: Caitlin and I have been sharing some duties on this, and I've been doing a little bit more right now, so we switched up on you. Sorry about that. In terms of moving forward on implementing the Addendum, we are now in the process of getting out to fishermen which devices that we have type approved.

We are moving towards our deadline of December 15th for all federal lobster and Jonah

crab vessels to have tracking devices on them at that time. We approved four tracking devices out of the five that applied. You will see them all listed on the board here. They vary from, 3 of these devices are 100 percent cellular, and 1 of the devices does have both satellite and cellular capabilities.

The next steps in moving forward on working on the tracking devices is to get the information out there for fishermen to purchase these devices. We're just working with the companies to get all the appropriate information on the Commission's web page, and I think other states will also have it available on their web pages as well.

Then we'll work also with the states to make sure that the harvesters get them installed, installed and approved by the states, prior to their first trips. Then if there are any measures that the states need to put in place, they are working towards getting those done for these federally permitted vessels. ACCSP is on track and moving forward with the interface for tracking the data.

We have tested all of the vendor's data submission, and these four companies have passed that test. NOAA Fisheries is working on complementary rulemaking to the Commission's requirements. I do not know where they are, in terms of meeting that December 15th deadline, and I can let Jay speak to that when we're done here. If there are any questions, I am happy to entertain them.

CHAIR McNAMEE: Jay, any comment to the timeline portion that Toni just asked?

MR. JAY HERMSEN: I think that's something that we could have published for December 15th, but we would have to ask leadership about an implementation timeline for that.

CHAIR McNAMEE: Thank you for that, Jay. Questions from the Board. I see Dan's hand.

MR. McKIERNAN: When we approved this last spring, we said it was to be implemented no later than, I think the end of the year, December something. But there are a whole lot of reasons we

need this data sooner than later. My Agency has moved forward with rulemaking, and we're requiring it on May 1.

We were under the impression that NOAA Fisheries would be on or about the same timeframe with their EVTR, because the EVTR and the tracker data have to be integrated. I would beg NMFS to fast track this thing, because on May 1, the Massachusetts fleet, we're going to have these installed.

CHAIR McNAMEE: Comment for Dan, Jay? I don't think there is an obligation or any response to what Dan just offered.

MR. HERMSEN: Not at this time, Mr. Chair, thank you.

CHAIR McNAMEE: John Clark.

MR. JOHN CLARK: I was just curious about the four approved devices. Is the idea to kind of winnow it down to eventually a single device, or are all these compatible? Is all the data that comes in compatible between systems?

MS. KERNS: All these devices are compatible; fishermen can choose from the different devices on their own. I don't have all the costs of the devices for all of them, so I can't tell you the total range. But it will be up to the fishermen to decide which device works best for their vessel, and they can use any one.

CHAIR McNAMEE: Okay, thanks. Eric Reid.

MR. REID: That is an interesting point about who gets to choose. You've only got one company that has satellite tracking, is that right? I agree that the data needs to be produced as soon as possible. I agree with that 100 percent for a lot of reasons, and I've been on that bandwagon for a long time.

But starting with Madam Coit this morning, we were talking about ropeless fishing, which is not going to happen tomorrow. But it is a solution

that people are very interested in making solve a problem. My question is, is there any discussion about which device can be integrated into ropeless fishing in the future?

You've got to know where you are, and of course real time for positioning of where the gear is, is going to be critical, because that way the lobsterman don't lose it, and the trawlermen don't find it, and so that other lobstermen can find it as well. That's just a question. If you don't have an answer today that's fine. But I'm interested to know what the answer is, and people might want to consider what device they pick that they're going to get paid for to install that is adaptable in the future, because the cellular ones are probably not going to be able to do it.

CHAIR McNAMEE: The question I think is, have we thought ahead a little bit to integrating with all of the other sort of things going on in the lobster world. Looking over at Toni for this one.

MS. KERNS: Thank you, Mr. Reid. As you are aware, we started up this project, I don't know, it might have been three or four years ago when we first started piloting them. The on-demand gear wasn't really being developed at that time. When we started this project, it wasn't something that we were thinking about. You know in the last 6 to 8 months it is something that we have thought about. At this time, it was not incorporated into the RFA, so none of the devices that we have right now can do that.

It is something the tracker group is thinking about and trying to think about how the technology can evolve, and work with the companies that are out there, or other companies that did not choose to participate in the RFA at this time. It is something that we are hoping to be able to do if on-demand gear becomes something that the entire industry is using, of even a small portion of the industry, if that is something that is going to be helpful. We will continue to keep it in mind.

CHAIR McNAMEE: I'll offer a comment as well, just from a couple of the, I don't know what you would

call them, meetings that I've been to on this. They may not be integrated yet. It certainly could be integrated in the future. But they don't necessarily need to be either. I think some of the technology with on-demand gear would exist as like an APP on your phone, that kind of thing. They can both exist without like a large burden to the fishermen. But in any case, it sounds like we're working on it. Pat.

MR. KELIHER: Yes, I think the key here is the sub-sea gear technology that is being worked on, so mobile gear fleet can see this, so law enforcement can see this gear. I'm not sure if this technology is right, but this technology, certainly we're looking at it from the harvester reporting side.

Having the harvester reporting APPs and these types of devices be linked. That's one thing that is being looked at to simplify those particular processes. I think in the long run as this technology improves, hopefully it's all going to come together. I agree with you, Eric, that we can't lose sight of those things.

CHAIR McNAMEE: David Borden, go ahead, David.

MR. BORDEN: On the federal rulemaking, I would just like to make the suggestion that this is really a critical part of this whole exercise. I think we should get a formal report at the next meeting by the NOAA Representative.

CHAIR McNAMEE: We made that request; I see Jay nodding his head. He heard that request. Thanks for that. Okay, anything further on this agenda topic? Not seeing any hands around the table. I see a hand online, Mike Luisi. Go ahead, Mike.

MR. MICHAEL LUISI: I'm sorry for not being there today. I just had a quick question for the Commission. There was a conversation in the past, and I'm sorry if I might have missed this during the presentation. The Commission had talked about trying to get funding to pay for the initial tracker system. Is that still in the plans, or is it going to be up to the states or the individual fishermen, at this point? Does anyone have any feedback on that?

CHAIR McNAMEE: It looks like Toni does. Go ahead, Toni.

MS. KERNS: Yes, Mike, this is the 14 million dollars that was allocated to the Commission, and included in that is to pay for trackers and the subscription fees for X amount of time, hopefully up to three years. The discussion at lunch we'll be talking about how the states are putting together spend plans for that money.

MR. LUISI: Excellent, okay, thank you so much.

CHAIR McNAMEE: Looking around the table, I'm not seeing any other hands. No hands online.

OTHER BUSINESS UPDATE ON 100 PERCENT HARVEST REPORTING FOR THE STATE OF MAINE

CHAIR McNAMEE: We had one additional item that was added to the agenda, and that is on 100 percent Harvester Reporting. Pat Keliher, I'll look to you to take that one away.

MR. KELIHER: I'll just be brief. I just wanted the Board to know that the state of Maine has implemented 100 percent harvest reporting one year ahead of schedule. Certainly, this pertains to the, excuse me, my apologies, Mr. Chairman. The state has implemented it. In order to implement it with the amount of harvesters we have, we have added 10 new staff members.

We had to set up a call center. This came at some really serious expenses to the state. We did have a lot of early infusion of cash from the ACCSP program as well, with some additional investments with general fund as well. It is a learning process, what we're doing right now. This is a big lift.

I can't remember what the total amount of data is, but I think it's more data than is collected in almost

combined between all the rest of the fisheries between Maine and Virginia. It's a big amount of data that ACCSP will be handling, and we are hopefully, we're doing it in stages, dealing with the active harvesters now, and then we'll be fully integrated.

We do have quite a few people who are not going to be able to do this electronically, so that has been a challenge, and we're trying to work through that as well. I just wanted to make the Board aware that we are plowing some new ground here as we move forward, so thank you.

CHAIR McNAMEE: Awesome, thank you, Pat. Any comments or anything for Pat on that? Renee, go ahead.

MS RENEE ZOBEL: Pat, just a process question for you. You said that they had a hunch that they probably wouldn't be able to go all electronic, despite that being the intention. What is the process in your state for the paper reporting, and how does that integrate? Just a curiosity question.

MR. KELIHER: To date we've only, I think approved, maybe a couple dozen individuals to supply us with paper, and then what we do is have staff enter that information electronically, with the idea that those individuals will continue to work with those individuals to get them up to speed to try to make sure that they can do that electronically in the future. It's not in any way, shape or form us saying, you know you don't have to do this forever. It's a oneyear process. There will be individuals though, that will not be able to do it, and so we're taking those types of things into consideration.

CHAIR McNAMEE: Thanks for that. I see a hand online, Mike Luisi, comment.

MR. LUISI: Yes, I just had a question for Pat. We've been talking about this a lot down here in our state in Maryland. Let me just ask you, Pat. Do you have regulations that mandate the electronic reporting, and then you make exemption for folks who just can't physically do it? How does that work? I'm just thinking about how we're going to, because we're talking about the same kind of thing down here as well.

MR. KELIHER: Certainly, all of this is in statute, it's required. But I have broad authority to be able to waive, in some instances, those type of requirements. We do so not liberally, very targeted, we're very targeted in those type of approaches. It was all considered in the development of the reporting though.

MR. LUISI: Okay, thank you very much.

CHAIR McNAMEE: Good discussion, thanks for that. Any other hands, questions, comments on this topic? Not seeing any around the table, I'm not seeing online. Before we wrap up, I'm going to give one last call out for any additional Other Business to come before the Board. I'll look for a hand.

I'm looking mostly online. Not seeing a hand, so I'm assuming we're okay. Waiting one last second. I'll make the pause really uncomfortably long. I've got 45 minutes in the bank here. Just a very explicit, David, do you have anything you want to bring before the Board?

MR. BORDEN: If you would like, Mr. Chairman.

CHAIR McNAMEE: Not trying to coerce you, just making sure.

MR. BORDEN: I can give you a one-minute comment, and the comment is that the Lobster Board moving ahead and looking ahead, is going to have to deal with a really diversified list of issues. I think that the solution to some of the problems we're going to deal with, we're going to have to consider other mechanisms.

At some point I think we need a broader discussion of how we're going to get at some of these problems. The whale issues aren't going to go away, wind issues aren't going to go away. We have too much effort in certain areas. I think we

need that type of broader discussion at some point at a subsequent meeting. Thank you.

CHAIR McNAMEE: Great, thank you, David, appreciate that. Good comments. Any reaction to that around the table? Not seeing any, all right so that takes us to the end of the agenda.

ADJOURNMENT

CHAIR McNAMEE: I think we can go ahead and adjourn, if anybody wants to make that motion. Motion made by Dennis, seconded by Steve Train. Any objections to that motion? Not seeing any around the table, so that is a wrap. Thanks everybody.

(Whereupon the meeting adjourned at 12:00 p.m. on Tuesday, January 31, 2023)

Atlantic States Marine Fisheries Commission

DRAFT ADDENDUM XXVII TO AMENDMENT 3 TO THE AMERICAN LOBSTER FISHERY MANAGEMENT PLAN FOR PUBLIC COMMENT

Increasing Protection of the Gulf of Maine/Georges Bank Spawning Stock



February 2023 Revised March 9, 2023



Sustainable and Cooperative Management of Atlantic Coastal Fisheries

Public Comment Process and Proposed Timeline

In August 2017, the American Lobster Management Board (Board) initiated Draft Addendum XXVII to increase the resiliency of the Gulf of Maine/Georges Bank (GOM/GBK) stock. Work on this addendum was paused due to the prioritization of work on take reduction efforts for North Atlantic right whales and the 2020 stock assessment. The Board reinitiated work on Draft Addendum XXVII in February 2021, and has since revised the goal of the addendum to consider a trigger mechanism such that, upon reaching the trigger, measures would be automatically implemented to increase the overall protection of spawning stock biomass of the GOM/GBK stock. The management action was initiated in response to signs of reduced juvenile settlement and the combining of the GOM and GBK stocks following the 2015 Stock Assessment. This document presents background on the Atlantic States Marine Fisheries Commission's management measures for public consideration and comment. Additionally, three appendices are included, which provide information on (A) the current condition of the stock, (B) potential impacts of proposed management measures, and (C) the development of the proposed trigger index.

This document was revised on March 9. Changes were made to section 3.2 (Issue 2, Option C) for Lobster Conservation Management Area 3 and Outer Cape Cod, and the public comment deadline has been extended.

The public is encouraged to submit comments regarding the proposed management options in this document at any time during the addendum process. The final date comments will be accepted is **April 8, 2023 at 11:59 p.m**. **EST.** Comments may be submitted by mail or email. If you have any questions or would like to submit comments, please use the contact information below.

Mail: Caitlin Starks

	Aarine Fisheries Commission d St. Suite 200A-N 201	Email: <u>comments@asmfc.org</u> (Subject line: Lobster Draft Addendum XXVII)
May – Dec 2022 Draft Addendum for Public Co		nent Developed
January 2023	Board Approved Draft Addendum	for Public Comment

February - April 2023 Public Comment Period Including Public Hearings

May 2023Board Reviews Public Comment, Selects Management
Measures, Final Approval of Addendum XXVII

TBD

Table of Contents

1.0 Introduction1
2.0 Overview
2.1 Statement of Problem
2.2 Status of the GOM/GBK Fishery
2.3 Status of the GOM/GBK Stock
2.3.1 2020 Stock Assessment4
2.3.2 YOY Surveys6
2.3.3 Ventless Trap Surveys and Trawl Surveys8
2.4 Economic Importance of the American Lobster Fishery9
2.5 Current Management Measures in the GOM/GBK Stock10
2.6 Biological Benefits of Modifying Gauge Sizes11
2.7 Potential Implications of Increasing Consistency of Measures12
2.7.1 Stock Boundaries12
2.7.2 Interstate Shipment of Lobsters12
2.7.3 Improve Enforcement13
3.0 Proposed Management Options13
3.1 Issue 1: Measures to be standardized upon final approval of Addendum XXVII13
3.2 Issue 2: Implementing management measures to increase protection of SSB14
3.3 Implementation of Management Measures in LCMA 319
4.0 Compliance
5.0 Recommendations for Actions in Federal Waters
6.0 References
7.0 Tables
Appendix A. 2022 Annual Data Update of American Lobster GOM/GBK Stock Indicators
Appendix B. Analysis of alternate minimum and maximum sizes as management options for Lobster Management Areas in the Gulf of Maine47
Appendix C. Trigger Mechanism Analysis and Recommendation

1.0 Introduction

The Atlantic States Marine Fisheries Commission (ASMFC) has coordinated the interstate management of American lobster (*Homarus americanus*) from 0-3 miles offshore since 1996. American lobster is currently managed under Amendment 3 and Addenda I-XXVI to the Fishery Management Plan (FMP). Management authority in the exclusive economic zone (EEZ) from 3-200 miles from shore lies with NOAA Fisheries. The management unit includes all coastal migratory stocks between Maine and Virginia. Within the management unit there are two lobster stocks and seven management areas. The Gulf of Maine/Georges Bank (GOM/GBK) stock (subject of this draft addendum) is primarily comprised of three Lobster Conservation Management Areas (LCMAs), including LCMAs 1 (GOM), 3 (federal waters), and Outer Cape Cod (OCC) (Figure 1). There are three states (Maine through Massachusetts) which regulate American lobster in states waters of the GOM/GBK stock; however, landings from the GOM/GBK stock occur from Rhode Island through New York and these states regulate the landings of lobster in state ports.

The American Lobster Management Board (Board) initiated Draft Addendum XXVII as a proactive measure to improve the resiliency of the GOM/GBK stock. Since the early 2000s, landings in the GOM/GBK stock have exponentially increased. In Maine alone, landings have increased three-fold from 57 million pounds in 2000 to a record high of 132.6 million pounds in 2016. Maine landings have declined slightly but were still near time-series highs at 97.9 million and 108.9 million in 2020 and 2021, respectively. However, since 2012, lobster juvenile settlement surveys throughout the GOM have generally been below the time series averages in all areas. These surveys, which measure trends in the abundance of newly-settled lobster, can be used to track populations and potentially forecast future landings. Consequently, persistent lower densities of settlement could foreshadow decline in recruitment and landings. In the most recent years of the time series, declines in other recruit indices have already been observed.

Given the American lobster fishery is one of the largest and most valuable fisheries along the Atlantic coast, potential decreases in abundance and landings could result in vast economic and social consequences. With peak values in 2016 and 2021, the at-the-dock value of the American lobster fishery has averaged \$660 million dollars from 2016-2021, representing the highest exvessel value of any species landed along the Atlantic coast during peak years. Ex-vessel value declined slightly from 2017 to 2020, but not proportionally to declines in landings. The vast majority of the overall landings value (>90%) comes from the GOM/GBK stock, and more specifically from the states of Maine through Rhode Island. As a result, the lobster fishery is an important source of jobs (catch, dock side commerce, tourism, etc.) and income for many New England coastal communities. The lack of other economic opportunities, both in terms of species to fish and employment outside the fishing industry, compounds the economic reliance of some coastal communities on GOM/GBK lobster – particularly in Maine.

Draft Addendum XXVII responds to signs of reduced juvenile settlement and the combination of the GOM and GBK stocks following the 2015 Stock Assessment. The Board specified the following objective statement for Draft Addendum XXVII:

Given persistent low settlement indices and recent decreases in recruit indices, the addendum should consider a trigger mechanism such that, upon reaching the trigger, measures would be automatically implemented to increase the overall protection of spawning stock biomass of the GOM/GBK stock.

Draft Addendum XXVII considers implementing management measures—specifically gauge and vent sizes—that are expected to add an additional biological buffer through the protection of spawning stock biomass (SSB). The addendum also considers immediate action upon final approval to standardize some management measures within and across LCMAs in the GOM/GBK stock. The purpose of considering more consistency in measures is to resolve discrepancies between the regulations for state and federal permit-holders, to provide a consistent conservation strategy, and simplify enforcement across management areas and interstate commerce.

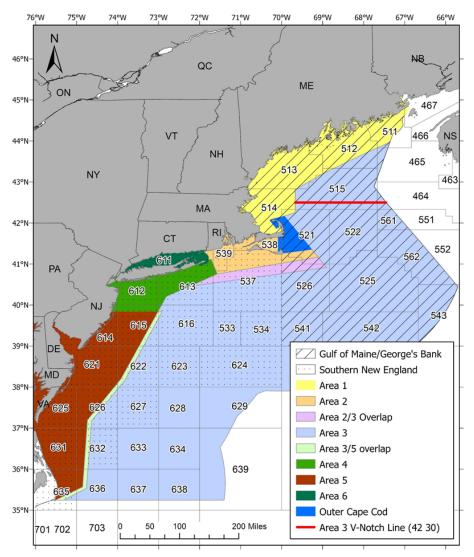


Figure 1. Lobster conservation management areas (LCMAs) in the American lobster fishery. LCMAs 1, 3, and Outer Cape Cod make up the majority of the GOM/GBK stock. The Area 3 v-notch line is shown in red where v-notching is required north of the 42°30' line.

2.0 Overview

2.1 Statement of Problem

While 2016 landings in the GOM/GBK lobster fishery were the highest on record, settlement surveys for more than five years have consistently been below the 75th percentile of their time series, indicating neutral or poor conditions. Additionally, there is evidence of declines in recruit abundance in ventless trap survey and trawl surveys for the GOM/GBK stock since the most recent stock assessment. These declines could indicate future declines in recruitment and landings. Given the economic importance of the lobster fishery to many coastal communities in New England, especially in Maine, potential reductions in landings could have vast socioeconomic impacts. In addition, the 2015 Stock Assessment combined the GOM and GBK stocks into a single biological unit due to evidence of migration between the two regions. As a result, there are now varying management measures within a single biological stock. In response to these two issues, the Board initiated Draft Addendum XXVII to consider the standardization of management measures across LCMAs.

However, in 2021, the Board revised the focus of Addendum XXVII to prioritize increasing biological resiliency of the stock over standardization of management measures across LCMAs. Increased resiliency may be achieved without completely uniform management measures, so the main objective of the Draft Addendum is to increase the overall protection of SSB while also considering management options that are more consistent than status quo. Increasing consistency across management areas may help to address some assessment and enforcement challenges, as well as concerns regarding the shipment and sale of lobsters across state lines.

2.2 Status of the GOM/GBK Fishery

The GOM/GBK fishery has experienced incredible growth over the past two decades. Throughout the 1980s, GOM/GBK landings averaged 35 million pounds, with 91% of landings coming from the GOM portion of the stock. In the 1990s, landings slightly increased to an average of 53 million pounds; however, landings started to rapidly increase in the mid-2000s. Over a one-year span (2003-2004), landings increased by roughly 18 million pounds to 86 million pounds. This growth continued through the 2000s with 97 million pounds landed in 2009 and 113 million pounds landed in 2010. Landings continued to increase and peaked at 156 million pounds in 2016 (Figure 2).

In the peak year of 2016, Maine alone landed 132.7 million pounds, representing an ex-vessel value of over \$541 million. The states of Maine through Rhode Island (the four states that account for the vast majority of harvest from the GOM/GBK stock), landed 158 million pounds in 2016, representing 99% of landings coastwide. Total ex-vessel value of the American lobster fishery in 2016 was \$670.4 million, the highest valued fishery along the Atlantic coast in 2016. While landings have declined slightly from peak levels in 2016, they remain near all-time highs. Coastwide landings and ex-vessel value for 2017-2021 averaged 133.4 million pounds and \$658.4 million, respectively. However, ex-vessel value in 2021 increased and was estimated at over \$924 million, the highest value in the time series.

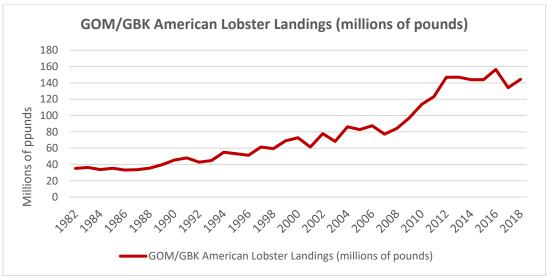


Figure 2. Landings in the GOM/GBK stock (1982-2018). Stock-specific landings are updated during each benchmark stock assessment.

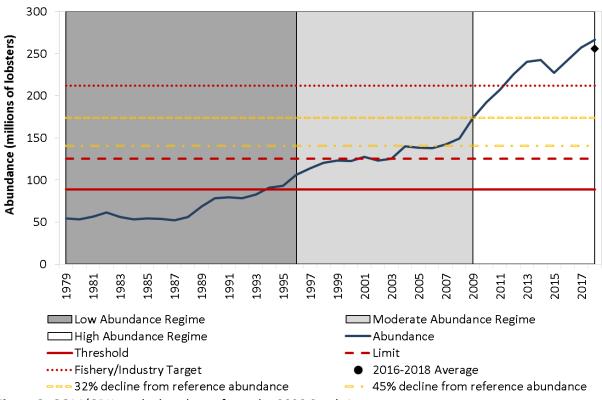
2.3 Status of the GOM/GBK Stock

2.3.1 2020 Stock Assessment

Results of the 2020 Benchmark Stock Assessment indicate a dramatic overall increase in the abundance of lobsters in the GOM/GBK stock since the late 1980s. After 2008, the rate of increase accelerated, and the stock reached a record high abundance level in 2018. Based on a new analysis to identify shifts in the stock that may be attributed to changing environmental conditions and new baselines for stock productivity, the GOM/GBK stock shifted from a low abundance regime during the early 1980s through 1995 to a moderate abundance regime during 1996-2008, and shifted once again to a high abundance regime during 2009-2018 (Figure 3). Spawning stock abundance and recruitment in the terminal year of the assessment (2018) were near record highs. Exploitation (proportion of stock abundance removed by the fishery) declined in the late 1980s and has remained relatively stable since.

Based on the new abundance reference points adopted by the Board, the GOM/GBK stock is in favorable condition. The average abundance from 2016-2018 was 256 million lobsters, which is greater than the fishery/industry target of 212 million lobsters. The average exploitation from 2016-2018 was 0.459, below the exploitation target of 0.461. Therefore, the GOM/GBK lobster stock is not depleted and overfishing is not occurring.

However, stock indicators based on observed data were also used as an independent, modelfree assessment of the lobster stocks, and some of these have shown concerning trends. These indicators included exploitation rates as indicators of mortality; young-of-the-year (YOY), fishery recruitment, and spawning stock biomass (SSB) as indicators of abundance; encounter rates as indicators of distribution; and total landings, effort, catch per unit effort, and monetary



Abundance for GOM/GBK Relative to Reference Points

measures as fishery performance indicators. Additionally, annual days with average water temperatures >20°C at several temperature monitoring stations and the prevalence of epizootic shell disease in the population were added as indicators of environmental stress. The 20°C threshold is a well-documented threshold for physiological stress in lobsters. Epizootic shell disease is considered a physical manifestation of stress that can lead to mortality and sub-lethal health effects.

While the stock assessment model and model-free indicators supported a favorable picture of exploitable stock health during the recent 2020 Stock Assessment, the assessment conversely noted YOY indices did not reflect favorable conditions in recent years and indicate potential for decline in recruitment to the exploitable stock in future years (Table 2). Specifically, YOY indices in two of five regions were below the 25th percentile of the time series (indicating negative conditions) in the terminal year of the assessment (2018) and when averaged over the last five years (2014-2018); the remaining three regions were below the 75th percentile (indicating negative neutral conditions).

Mortality indicators generally declined through time to their lowest levels in recent years. Fishery performance indicators were generally positive in recent years with several shifting into positive conditions around 2010. Stress indicators show relatively low stress, but indicate some

Figure 3. GOM/GBK stock abundance from the 2020 Stock Assessment.

increasingly stressful environmental conditions through time, particularly in the southwest portion of the stock.

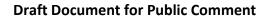
As recommended in the 2020 stock assessment, a data update process will occur annually to update American lobster stock indicators, including YOY settlement indicators, trawl survey indicators, and ventless trap survey indices. The second annual data update was completed in 2022 with data through 2021, and the results are provided in Appendix A.

2.3.2 YOY Surveys

Since 2018, YOY indices have continued to show unfavorable conditions in the GOM/GBK stock. There have been sustained low levels of settlement observed from 2012 to 2021 (Figure 4). In Maine, 2019, 2020, and 2021 YOY indices were below the 75th percentile of their time series throughout most statistical areas sampled, (all except Statistical Area 512 in 2019). In 2021, YOY values fell below the 25th percentile in all three Northeast areas. In New Hampshire, YOY values have shown a lot of interannual variation over the past three years (2019-2021) with values above the 50th percentile in 2019, then below the 25th in 2020, followed by an increase in 2021 above the 75th percentile of the time series. In Massachusetts, the 2019 index was below the 25th percentile of its time series; it rebounded slightly in 2020 and 2021, but remained below the 75th percentile.

Sustained and unfavorable YOY indices are concerning as they could foreshadow poor future year classes in the lobster fishery. Lobster growth is partially temperature-dependent and it is expected that it takes seven to nine years for a lobster to reach commercial size. Thus, decreased abundance of YOY lobsters today could foreshadow decreased numbers of lobsters available to the fishery in the future. Given there have been nine consecutive years of low YOY indices in the GOM, this trend may soon be reflected in the GOM/GBK stock. What is more concerning is that declines in the Southern New England (SNE stock), which is currently at record low abundance, began with declines in YOY indices. Specifically, SNE YOY indices began to decline in 1995, two years before landings peaked in 1997, and roughly five years before landings precipitously declined in the early 2000s.

There are several hypotheses as to why the YOY indices have been low and what this could mean for the future of the GOM/GBK stock. One hypothesis is that declines in the YOY indices are reflecting a true decline in the newly-settled portion of the stock, and are related to declining food resources (specifically zooplankton). Carloni et al. (2018) examined trends in lobster larvae to explore linkages between SSB and YOY abundance. The study found a significant increasing trend in stage I larval abundance consistent with the increases in SSB in the GOM. Planktonic postlarvae, on the other hand, had a declining trend in abundance similar to trends for YOY settlement throughout western GOM. The study also found significant correlations between lobster postlarvae and the copepod *C. finmarchicus*, but there were no relationships with other zooplankton. This suggests recruitment processes in the GOM could be linked to larval food supply.



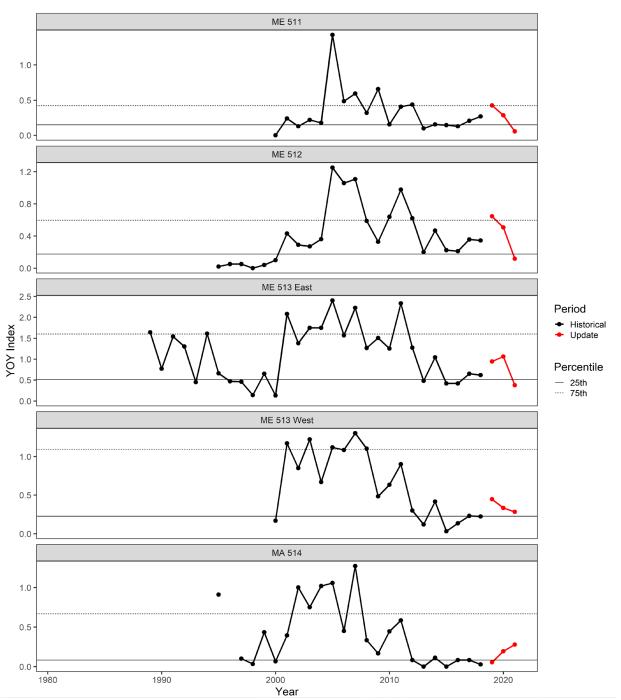


Figure 4. GOM abundance indicators: YOY indices.

Declines in the YOY indices could also be an artifact of the lobster population moving further offshore. Recent work suggests warming in the GOM on the scale of decades has expanded thermally suitable habitat areas and played a significant role in the increase of observed settlement into deeper areas, particularly in the Eastern Gulf of Maine (Goode et al. 2019), so lobster settlement may be diluted across a greater area. Given the YOY surveys typically occur inshore, the surveys may be unable to account for increased abundance of YOY lobsters farther offshore. In an effort to test this theory, the Technical Committee (TC) looked at potential

increases in the habitat available for recruitment in the GOM/GBK stock due to warming waters. Specifically, the TC calculated the quantity of habitat by depth in the GOM. Results showed that incremental increases in depth result in incremental increases in habitat suitable for recruitment and small observed decreases in recruit densities in shallow waters. Therefore, there is no evidence that incremental increases in depth result in exponential increases in available habitat. In order for the diffusion of YOY lobsters over a larger area to completely explain the observed decreases in the YOY indices, the habitat available to recruitment would have to more than double. This suggests dilution effects from increased habitat availability alone are not sufficient to explain decreases in the YOY indices, and there are likely other changes occurring in the system.

2.3.3 Ventless Trap Surveys and Trawl Surveys

While YOY surveys have detected declines in the number of newly settled lobsters for about a decade, results of the ventless trap survey (VTS) and trawl surveys, which encounter larger sized lobsters just before they recruit to the fishery, have only exhibited evidence of decline in the most recent years. The interpretation of these trends is complicated by sampling restrictions and limited surveys in 2020 resulting from the COVID-19 pandemic. VTS indices show declines since peaking in 2016, especially in the eastern regions (Figure 5). The Maine/New Hampshire and the Massachusetts Fall Trawl Surveys have both showed declines in recruit lobster abundance since 2018. For the spring trawl surveys, recruit abundance indices increased from 2018 to 2019, but decreased again in 2021. Only the Maine/New Hampshire Fall Trawl Survey ran in 2020 due to the COVID-19 pandemic.

It is important to continue to closely monitor these surveys as continued decreases in the VTS and/or trawl surveys would confirm the declines seen in the YOY surveys.

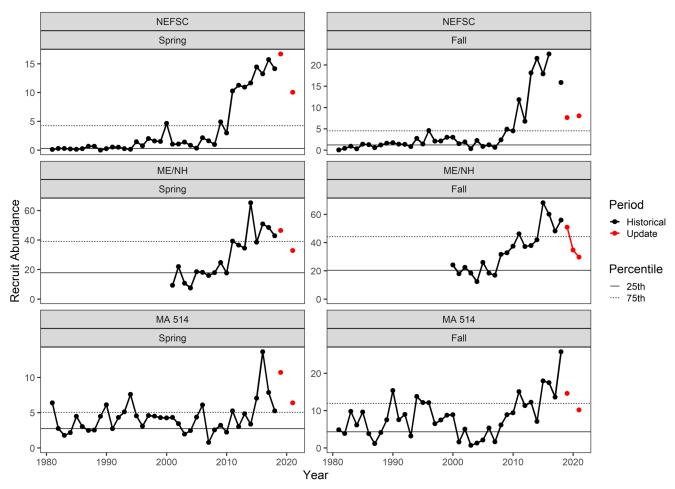


Figure 5. GOM abundance indicators: trawl survey recruit abundance

2.4 Economic Importance of the American Lobster Fishery

Much of the concern regarding the declines in the lobster indices result from the vast economic importance of the lobster fishery throughout the GOM. For the states of Maine through Massachusetts, lobster is one of the most valuable fisheries and the large majority of landings come from the GOM/GBK stock.

For Maine, American lobster is an essential economic driver for the coastal economy. Lobster annually represents more than 75% of Maine's marine resource landings by ex-vessel value (82% in 2021). The landings peaked in 2016 with more than 132 million pounds harvested, while in 2021, the ex-vessel value was estimated as more than \$730 million dollars¹. The lobster harvester sector includes more than 5,770 license holders, 4,200 of which are active license holders who complete more than 250,000 trips a year selling to 240 active lobster dealers (Maine DMR, unpublished data). The lobster distribution supply chain was estimated in 2018 to contribute an additional economic impact of \$1 billion annually ("Lobster to Dollars," 2018).

¹ <u>https://www.maine.gov/dmr/commercial-fishing/landings/documents/lobster.table.pdf</u>

Not included in these numbers are the vessel crew members and other associated businesses (bait vessels and dealers, boat builders, trap builders, and marine supply stores) that are essential in delivering lobsters to consumers worldwide, supporting the industry, and driving Maine's coastal communities.

The American lobster fishery is the most valuable commercial fishery in New Hampshire with an ex-vessel value of over \$44 million in 2021. The value of lobster landed accounted for over 90% of the value of all commercial species landed in New Hampshire. The lobster fishery in New Hampshire includes over 300 licensed commercial harvesters, over 200 of which are active, who sold to more than 30 licensed wholesale lobster dealers (Renee Zobel, personal communication). The importance of the economic impact of the lobster fishery to New Hampshire is also seen in the over 350 businesses licensed to sell lobster to consumers at the retail level.

For Massachusetts, American lobster is the second most valuable fishery in terms of overall landings value, and the most valuable of all fisheries conducted within Massachusetts state waters. The total estimated value for annual lobster landings in Massachusetts has been over \$93 million per year on average for 2017-2021. On average, landings from the GOM/GBK stock make up 96% of the total lobster landings for Massachusetts; roughly 72% of this comes from LCMA 1, 22% from LCMA 3, and 7% from LCMA OCC (Massachusetts DMF, unpublished data).

Though the state is not directly situated on the GOM, a significant contingent of the Rhode Island commercial lobster fleet harvests lobsters in GOM/GBK. In 2020 and 2021, approximately 30% and 19% of Rhode Island's commercial landings, respectively, came from statistical areas in GOM/GBK (2020: 497,705 pounds, 2021: 257,225 pounds). The estimated ex-vessel value for lobsters from this stock was approximately \$2.9 million in 2020.

2.5 Current Management Measures in the GOM/GBK Stock

Lobster is currently managed under Amendment 3, and its 27 addenda. One of the hallmarks of Amendment 3 was the creation of seven LCMAs along the coast. The GOM/GBK stock is primarily comprised of LCMAs 1 and OCC as well as the northern half of LCMA 3. Each management area has a unique set of management measures. Table 1 shows the current measures for each area. Because the GOM/GBK stock is now assessed as a single area, the result is a diverse suite of regulations for each LCMA within a single stock unit, creating challenges for assessing the impacts of management measures within the stock. Specifically, the minimum gauge size (the smallest size lobster that can be legally harvested) in LCMA 1 is 3 $\frac{1}{7}$, while it is $3^3/8^{7}$ in LCMA OCC and $3^{17}/32^{7}$ in LCMA 3. It should be noted that the coastwide minimum size remains at 3 $\frac{1}{7}$, which is the minimum size any LCMA may implement. Each LCMA has its own minimum size that may be larger than the coastwide minimum size.

Likewise, the maximum gauge size (the largest size lobster that can be legally harvested) differs among the three areas, with a 5" maximum gauge size in LCMA 1, a 6 ¾" maximum gauge size in LCMA 3 and for federal permit holders in LCMA OCC, and no maximum gauge size for stateonly OCC permit holders. V-notch definitions are also inconsistent. LCMA 1 has a no tolerance for possession of any size v-notch or mutation. LCMA 3 defines a v-notch as greater than 1/8" with or without setal hairs while OCC has different definitions for federal permits (similar to LCMA 3) and state only permits (> 1/4" without setal hairs). There are also inconsistent v-notch requirements across LCMAs, with LCMA 1 requiring all egg-bearing lobsters to be v-notched, LCMA 3 only requiring v-notching above $42^\circ 30'$ line, and no requirement in OCC (Figure 1).

Several concerns have been noted regarding the current management measures beyond these disparities. At the current minimum sizes, growth overfishing is occurring in the LCMAs within the GOM/GBK stock. Growth overfishing refers to the harvest of lobsters before they reach the size where their collective biomass (and fishery yield) would be greatest, and when they have very large scope for additional growth. This is demonstrated by the potential increases in catch weight associated with increasing the minimum gauge size (see Appendix B). In LCMA 1, most of the catch consists of individuals within one molt of minimum legal size, which results in a much smaller yield-per-recruit (YPR) than could be achieved if lobsters were allowed to survive and grow to larger sizes before harvest. While the size distribution of the lobsters harvested lobsters in LCMA 3 is much broader than inshore (the fishery is less recruit-dependent) there is still considerable potential for additional growth, and delaying harvest could increase yield per recruit in this region as well. Another concern is the loss of conservation benefits across LCMAs due to inconsistent measures between areas. The 2015 assessment combined the GOM and GBK areas into one stock because the Northeast Fisheries Science Trawl Survey showed evidence of seasonal exchange and migration of lobsters between areas. Loss of conservation benefits occurs when lobsters are protected in one area but can be harvested in another when they cross LCMA boundaries.

2.6 Biological Benefits of Modifying Gauge Sizes

Of the existing biological management measures for the lobster fishery, minimum and maximum gauge sizes are most likely to have biological impacts on the GOM/GBK stock and fishery. Analyses were performed by the TC to evaluate the impacts of alternate minimum and maximum sizes for the LCMAs within the stock. For LCMA 1, analysis involved updating existing simulation models with more recent data to estimate the impacts of specific minimum and maximum gauge size combinations on total weight of lobsters landed, number of lobsters landed, SSB and exploitation. A separate analysis for LCMA 3 was performed due to concerns that the offshore fishery in LCMA 3 is considerably different from the inshore (which tends to drive stock-wide modelling results). For OCC, simulations were run with both LCMA 1 and LCMA 3 parameters because it is considered a transitional area. The full report on these analyses is included in Appendix B.

Based on these analyses, several general assumptions can be made about potential changes to the minimum and maximum gauge sizes. Increasing the minimum legal gauge size in LCMA 1 is projected to result in large increases in SSB; while increasing the minimum gauge size for LCMA 3 and OCC is projected to result in much smaller increases in SSB relative to LCMA 1. This is primarily because of the significantly larger magnitude of the LCMA 1 fishery and that the current minimum legal size in LCMA 1 is significantly below the size at maturity. Meanwhile, the current minimum gauge sizes in LCMA 3 and OCC are much closer to the size at maturity and

landings from these areas account for only a small fraction of the fishery. Minimum sizes that approach or exceed the size at maturity produce increasing returns on SSB as this allows a much larger portion of the population to reproduce at least once. Therefore, increasing minimum legal size in LCMA 1 to $3^{15}/_{32}$ " (88 mm) is projected to result in a near doubling of SSB. This would significantly increase egg production potential and may provide some buffer against the effects of future changes in productivity. At the same time, this change would be expected to produce only marginal decreases in the total number of lobsters landed but result in a net increase in YPR and total weight of catch.

Generally, decreasing maximum gauge sizes is projected to have larger effects for LCMA 3 both relative to increasing the minimum size in LCMA 3 and to changing the maximum sizes for the other LCMAs. However, relative to increasing the minimum size in LCMA 1, the positive impact to the overall stock projected to result from decreasing the maximum gauge sizes in LCMA 3 and OCC is significantly smaller.

2.7 Potential Implications of Increasing Consistency of Measures

Beyond the biological concerns for the GOM/GBK lobster stock, the disparities in the current measures also create challenges for stock assessment, law enforcement, and commerce. Increasing consistency among the measures for the LCMAs within the stock could have benefits in each of these areas, which are described in the following sections.

2.7.1 Stock Boundaries

A complicating factor in the management of lobster is that the boundaries of the LCMAs do not align with the biological boundaries of the stocks (GOM/GBK vs. SNE). This is particularly problematic in LCMA 3 which spans both GOM/GBK and SNE. The intricacy of the stock boundaries is further complicated by the fact that many vessels fishing out of Rhode Island and Massachusetts, which are harvesting lobsters on Georges Bank, must travel through the SNE stock area to reach their port of landing. In addition, these vessels may be permitted to fish in multiple management areas, including areas that span both lobster stocks.

To date, there have been no permit requirements to delineate within which stock a harvester in LCMA 3 is eligible to fish. In addition, management actions responding to the decline in the SNE stock have been applied throughout LCMA 3. Given the Board initiated this addendum with the goal of increasing resiliency in the GOM/GBK stock, new management measures must either apply to all LCMA 3 fishermen regardless of location and stock fished (with implications on the SNE fishery) or be stock specific.

2.7.2 Interstate Shipment of Lobsters

Increasing consistency in regulations may address concerns regarding the sale and shipment of lobsters across state lines. With decreased landings in SNE and expanding markets for the GOM/GBK stock, there has been increased demand for the shipment of lobsters across state lines. This movement of lobster can be complicated by the fact that the gauge sizes differ across LCMAs, and many states implement the minimum and maximum gauge sizes as possession limits rather than landing limits per state regulation or law. This means the gauge sizes apply to

anyone in the lobster supply chain, not just harvesters. While these strict regulations improve the enforcement of gauge sizes, it can complicate interstate shipment of lobsters, particularly given the minimum size in LCMA 1 is smaller than the other management areas. As a result, some dealers must sort lobster by size in order to ship product across state lines.

Moving toward more consistent minimum sizes within the inshore LCMAs would help alleviate this issue by easing the ability of states to participate in the GOM/GBK lobster supply chain. This would not only reduce the burden on dealers that sort product by size but also enhance the enforcement of gauge sizes in the fishery.

2.7.3 Improve Enforcement

Another potential advantage of more consistent management measures is the ability to improve enforcement throughout the stock. Currently, disparate management measures hinder the ability for law enforcement to enforce various regulations in the lobster fishery. For example, vessels landing in Massachusetts harvest lobsters from four LCMAs, each of which has a different set of minimum gauge sizes (ranging from 3 $\frac{17}{32}$ ") and maximum gauge sizes (ranging from 5" to no maximum gauge size). Because a dealer can legally purchase and sell lobsters from areas with different minimum and maximum gauge sizes, only the most liberal measure can be implemented as a strict possession limit. The Law Enforcement Committee has continually recommended the use of standardized management measures in the lobster fishery, as inconsistent regulations mean that the least restrictive regulation becomes the only enforceable standard once product leaves the dock. In addition, regulatory inconsistencies decrease the likelihood of successful prosecution of violators.

3.0 Proposed Management Options

The following management options consider modifications to the management program with the goal of increasing protection of the GOM/GBK spawning stock. The final management program selected will apply to LCMAs 1, 3, and OCC.

- Issue 1 considers the standardization of a subset of management measures within LCMAs and across the GOM/GBK stock (Section 3.1).
- Issue 2 considers applying either a trigger mechanism or a predetermined schedule for implementing biological management measures that are expected to provide increased protection to SSB and increase the resiliency of the stock (Section 3.2).

When the Board takes final action on the addendum, there is the opportunity to select any measure within the range of options that went out for public comment, including combining options across issues.

3.1 Issue 1: Measures to be standardized upon final approval of Addendum XXVII

This issue considers options to modify some management measures immediately upon final approval of the Addendum to achieve more consistency in measures within and across LCMAs. One option proposes to modify some of the OCC measures to address differing regulations for state and federal permit holders. Specifically, for state-permitted harvesters in state waters there is no maximum gauge size and the v-notch definition is 1/4" without setal hairs. For

federal permit holders, the maximum gauge size is $6^{3}/_{4}$ " and the v-notch definition is $1/_{8}$ " with or without setal hairs. The disparity between regulations for different harvesters within the same area creates challenges for enforcement, and potentially weakens the conservation benefit of the stricter definition.

Additional options are proposed to standardize v-notch regulations across the LCMAs within the GOM/GBK stock, as well as regulations related to the issuance of tags for trap tag losses. Uniformity in these measures would benefit enforcement and apply a consistent conservation strategy across the stock unit.

Option A: Status Quo

This option would maintain the current management measures for each LCMA at final approval of the addendum.

Option B: Standardized measures to be implemented upon final approval of addendum

The Board may select more than one of the below options. The states would be required to implement the selected management measures for the fishing year specified by the Board at final approval of the addendum.

- Sub-option B1: Upon final approval of the addendum, implement standardized measures within GOM/GBK stock LCMAs to the most conservative measure where there are inconsistencies between state and federal regulations. This would result in the maximum gauge being standardized to 6-3/4" for state and federal permit holders, and the v-notch possession definition being standardized to ¹/₈" with or without setal hairs in Outer Cape Cod (OCC). This means harvest is prohibited for a female lobster with a v-shaped notch greater than ¹/₈".
- **Sub-option B2**: Upon final approval of the addendum, implement a standard v-notch requirement across all LCMAs that include the GOM/GBK stock. This would result in mandatory v-notching for all eggers in LCMAs 1, 3, and OCC.
- **Sub-option B3**: Upon final approval of the addendum, implement a standard v-notch possession definition of ¹/₈" with or without setal hairs for LCMAs 1, 3, and OCC. Any jurisdiction could implement more conservative regulations.
- **Sub-option B4:** Upon final approval of the addendum, standardize regulations across LCMAs 1, 3, and OCC to limit the issuance of trap tags to equal the harvester trap tag allocation. This would mean no surplus trap tags would be automatically issued until trap losses occur and are documented.

3.2 Issue 2: Implementing management measures to increase protection of SSB

The primary objective of this proposed action is to increase the protection of SSB in the GOM/GBK stock. The proposed options consider changes to the minimum and maximum gauge sizes along with corresponding vent sizes for the LCMAs within the stock. The proposed measures are expected to 1) increase SSB, and 2) result in the minimum gauge size increasing

to meet or exceed the size at 50% maturity (L50) for each LCMA (LCMA 1: eastern GOM L50 = 88 mm, western GOM L50 = 83 mm, LCMA 3: Georges Bank L50 = 91 mm). Appendix B includes a full technical report of analysis performed to project the impacts of various gauge size combinations on total weight of lobsters landed, number of lobsters landed, SSB and exploitation.

This issue proposes two approaches for implementing management changes to increase protection of SSB. One approach, which is applied in Option B, is to establish a trigger mechanism whereby pre-determined management changes would be triggered upon reaching a defined trigger level based on observed changes in recruit (71-80 mm carapace length) abundance indices. The proposed mechanism includes establishing a management trigger based on recruit conditions observed in three surveys that were used to inform the assessment model estimates of reference abundance and stock status for the GOM/GBK stock. These recruit indices include: 1) combined Maine/New Hampshire and Massachusetts spring trawl survey index, 2) combined Maine/New Hampshire and Massachusetts fall trawl survey index, and 3) model-based VTS index.

The management trigger is defined by a certain level of decline in the indices from an established reference period. The reference value for each index is calculated as the average of the index values from 2016-2018. This reference period reflects the condition of the stock when the 2020 stock assessment was completed, and includes the same years used to determine the stock status and reference points. The percent declines in the indices are expected to approximate comparable declines in overall abundance of the stock, and relate to the abundance reference points established by the Board. The analyses conducted to develop the trigger mechanism and evaluate its performance in appropriately triggering management are described in detail in Appendix C. Figure 6 (top left panel) shows the calculated trigger index compared to the two proposed trigger levels in this document.

A second approach, which is applied in Option C, is to establish a pre-determined schedule for future changes to the management measures. This approach is more proactive in nature and addresses the issue of growth overfishing by increasing the minimum legal size while the stock conditions are favorable.

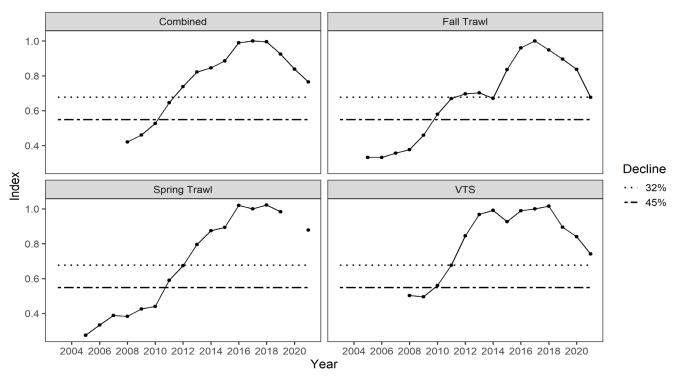


Figure 6. Scaled survey-specific indices and combined trigger index compared to proposed trigger levels. Top-left: combined trigger index that would be used to trigger changes in management measures. Topright: moving three-year average of fall trawl survey indices. Bottom-left: moving three-year average of spring trawl survey indices. Bottom-right: moving three-year average of VTS indices.

Option A: Status Quo

Under this option there would be no additional changes to the management measures for the LCMAs within the GOM/GBK stock beyond the option(s) selected under Issue 1.

Option B: Gauge and vent size changes triggered by a defined change in trigger index

Under this option, the Board would establish a trigger mechanism whereby pre-determined management changes would be implemented upon reaching a defined trigger level based on observed changes in recruit abundance indices compared to the reference level of the trigger index. Upon the defined trigger level being reached, a predetermined set of management measures selected by the Board (see *Management Measures*, below) would be implemented for the following fishing year. Including the 2021 survey data as the terminal year, the most recent trigger index value was 0.765, which equates to a 23% decline from the reference period (Figure 6).

Trigger Level

If Option B is selected, the Board must establish a trigger level that, when reached, would result in the implementation of biological management measures to increase the protection of SSB in the GOM/GBK stock. The Board may select one of the following options as the trigger level, or any number within the range of the proposed options.

- Trigger Option 1: Management measures for the following fishing year would be implemented when a 32% decline in the trigger index is observed relative to the reference abundance level (equal to the average of the index values from 2016-2018). This trigger level approximates a decline in reference abundance to the level where the stock abundance regime shifted from moderate to high abundance (Figure 3).
- Trigger Option 2: Management measures for the following fishing year would be implemented when a 45% decline in the trigger index is observed relative to the reference abundance level (equal to the average of the index values from 2016-2018). This trigger level approximates a decline in stock abundance to the 75th percentile of lobster abundance during the moderate abundance regime from the stock assessment (Figure 3).

Management Measures

If Option B is selected, the Board must also select the biological management measures that would be automatically implemented to increase the protection of SSB in the GOM/GBK stock when the defined trigger level is reached. The following options include specific gauge and escape vent sizes for each LCMA in the GOM/GBK stock, and possible timelines for implementing changes to the gauge and vent sizes. In the first option, a single change in gauge and vent sizes would occur, whereas the second option would allow for management measures to be implemented via a series of gradual changes in gauge sizes, with the first change triggered by a change in the abundance indices, as defined by the Board.

• Measures Option 1: Upon the established trigger level being reached, the minimum gauge size for LCMA 1 would increase from the current size (3 ¼") to 3 ³/₈" for the following fishing year. The escape vent size in LCMA 1 would be adjusted corresponding with the minimum gauge size change. Additionally, the maximum gauge size in LCMA 3 and OCC would decrease to 6" for the following fishing year. The table below lists the management measures that would be automatically implemented when the trigger point is reached, with changes from the current measures in bold.

The proposed increase to the minimum gauge size in LCMA 1 is expected to increase the proportion of the population protected from being harvested by the fishery before being able to reproduce. The proposed decreases to the maximum gauge sizes in LCMA 3 and OCC are expected to enhance resiliency by placing forever protections on a small proportion of the population, including larger lobsters of both sexes. The proposed gauge and vent size changes are expected to maintain similar retention rates of legal lobsters and protection of sub-legal sizes as the current gauge and vent sizes. The vent size is consistent with the current vent size used in SNE for the same minimum gauge size of $3^3/_8$ ".

Issue 2, Option B: Management Measures Option 1							
Area	LCMA 1	LCMA 3	OCC				
Measures to	Minimum gauge: 3 ³ / ₈ " (86	Minimum gauge:	Minimum gauge:				
Implement in	mm)	status quo	status quo				
Following	Maximum gauge: status quo	Maximum gauge: 6"	Maximum gauge: 6"				
Fishing Year	Vent size: 2 x 5 ³ / ₄ "	Vent size: status quo	Vent size: status quo				
	rectangular; 2 ⁵ / ₈ " circular						

Measures Option 2: Under this option, when the established trigger level is reached a series of gradual changes in gauge sizes for the LCMAs in the GOM/GBK stock would be initiated. The minimum gauge size would change in increments of ¹/₁₆", and the maximum gauge size would change in increments of ¼". The first change in measures would be triggered by a change in the recruit abundance indices greater than or equal to the trigger level established by the Board. Following this initial change, incremental changes to the gauge sizes would occur every other year. The gauge size changes that would be implemented at each step and the final gauge sizes that would be reached for each area are shown in the table below. The escape vent size in LCMA 1 would be adjusted once, when the final gauge size is implemented, to maintain protection of sublegal sizes. The final vent size is also consistent with the current vent size used in SNE for the same minimum gauge size of 3³/₈".

	Issue 2, Option B: Management Measures Option 2							
Area	LCMA 1	LCMA 3	000					
Current	Minimum gauge: 3 ¼"	Minimum gauge: 3 ¹⁷ / ₃₂ "	Minimum gauge: $3^{3}/_{8}^{"}$					
Measures	Maximum gauge: 5"	Maximum gauge: 6 ¾"	Maximum gauge: 6 ¾"					
	Vent size: status quo	Vent size: status quo	Vent size: status quo					
Initial gauge	Minimum gauge:	Minimum gauge:	Minimum gauge:					
size changes	3 ⁵/ ₁₆ ″ (84 mm)	status quo	status quo					
	Maximum gauge: status	Maximum gauge: 6 ½"	Maximum gauge: 6 ½"					
	quo	Vent size: status quo	Vent size: status quo					
	Vent size: status quo							
Intermediate	Minimum gauge:	Minimum gauge:	Minimum gauge:					
gauge sizes	3 ³/ ₈ " (86 mm)	status quo	status quo					
	Maximum gauge: status	Maximum gauge: 6 ¼"	Maximum gauge: 6 ¼"					
	quo	Vent size: status quo	Vent size: status quo					
	Vent size: 2 x 5 ³ / ₄ "							
	rectangular; 2 ⁵/ ₈ "							
	circular							
Final gauge	Minimum gauge: 3 ³ / ₈ "	Minimum gauge:	Minimum gauge:					
and vent	Maximum gauge: status	status quo	status quo					
sizes	quo	Maximum gauge: 6"	Maximum gauge: 6"					
	Vent size: status quo	Vent size: status quo	Vent size: status quo					

Option C: Scheduled changes to gauge and escape vent sizes

This option considers establishing a predetermined schedule for implementing gradual changes to the minimum gauge and vent size in to increase the SSB (see table below for the proposed changes). The first step increases the minimum gauge size in LCMA 1 by 1/16" to $3^5/16$ " and decreases the maximum gauge size in LCMA 3 and OCC to $6 \frac{1}{2}$ ". The second step only decreases the maximum gauge size in LCMA 3 and OCC to $6 \frac{1}{2}$ ". The third and final step increases the minimum gauge size in LCMA 3 and OCC to $6 \frac{1}{2}$ ". The third and final step increases the minimum gauge size in LCMA 1 to $3^3/8$ ", and decreases the maximum gauge size in LCMA 3 and OCC to $6^{"}$. The vent size in LCMA 1 would also be adjusted once, at the same time the final minimum gauge size is implemented. The final gauge and vent size changes are expected to maintain similar retention rates of legal lobsters and protection of sub-legal sizes as the current gauge and vent sizes.

The implementation deadline for the measures included in the first step would be no later than the 2026 fishing year. The implementation deadline for the measures included in the second step would be one year after the first step. The implementation deadline for the measures in the third step would be two years after the first step.

Issue 2, Option C							
Option C	LCMA 1	LCMA 3	000				
Current	Minimum gauge: 3 ¼"	Minimum gauge: 3 ¹⁷ / ₃₂ "	Minimum gauge: 3 ³ / ₈ "				
Measures	Maximum gauge: 5"	Maximum gauge: 6 ¾"	Maximum gauge: 6 ¾"				
	Vent size: status quo	Vent size: status quo	Vent size: status quo				
Step 1:	Minimum gauge:	Minimum gauge:	Minimum gauge:				
Implementation	3 ⁵ / ₁₆ " (84 mm)	status quo	status quo				
no later than	Maximum gauge:	Max gauge: 6 ½"	Max gauge: 6 ½"				
2026 fishing	status quo	Vent size: status quo	Vent size: status quo				
year	Vent size: status quo						
Step 2:		Minimum gauge:	Minimum gauge: status				
Implementation		status quo	quo				
one year after		Maximum gauge: 6 ¼"	Maximum gauge: 6 ¼"				
initial measures		Vent size: status quo	Vent size: status quo				
Step 3:	Minimum gauge:	Minimum gauge:	Minimum gauge: status				
Implementation	3 ³ / ₈ (86 mm)	status quo	quo				
two years after	Maximum gauge:	Maximum gauge: 6"	Maximum gauge: 6"				
initial measures	status quo	Vent size: status quo	Vent size: status quo				
	Vent size:						
	$2 \times 5^{3}/_{4}$ " rectangular;						
	2 ⁵ / ₈ " circular						

3.3 Implementation of Management Measures in LCMA 3

Although only a portion of LCMA 3 pertains to the GOM/GBK stock (see Section 2.8 Stock Boundaries for additional information), the measures selected by the Board pertaining to LCMA 3 would apply to all LCMA 3 permit holders, including those that fish on the SNE stock.

Applying the selected measures to only the GOM/GBK portion of LCMA 3 would create a significant administrative burden, as well as additional potential for confusion and noncompliance among LCMA 3 permit holders. To date, there have been no permit requirements that delineate in which stock area an LCMA 3 harvester is eligible to fish. Given the objective of this addendum is specific to protecting the GOM/GBK spawning stock, new management measures must either apply to all LCMA 3 harvesters regardless of location and stock fished (and therefore also impact the SNE fishery) or new measures would have to be stock (and geographic area) specific in order to only affect the GOM/GBK fishery. For example, an LCMA 3 harvester seeking to continue fishing in GOM/GBK would either have to declare and be permitted to fish within the GOM/GBK stock area to be held accountable, or opt to not participate in the GOM/GBK fishery to avoid the more restrictive measures.

Applying the measures across the entire management area is consistent with previous changes to the management measures in LCMA 3. When several addenda implemented reductions in fishing capacity and the Area 3 conservation tax (Addendum XIX) to address the declining condition of the SNE stock, the measures were also applied to the GOM/GBK portion of LCMA 3, which was not overfished nor experiencing overfishing. Though the impacts of the proposed measures on the SNE stock and fishery have not been analyzed, it is likely that they would have only minor negative impacts to catch and positive impacts to SSB considering the current depleted status of the stock.

4.0 Compliance

If the existing FMP is revised by approval of this Draft Addendum, the Board will designate dates by which states will be required to implement the provisions included in the addendum. A final implementation schedule will be identified based on the management tools chosen.

5.0 Recommendations for Actions in Federal Waters

The management of American lobster in the EEZ is the responsibility of the Secretary of Commerce through the National Marine Fisheries Service. The Atlantic States Marine Fisheries Commission recommends that the federal government promulgate all necessary regulations in Section 3.0 to implement complementary measures to those approved in this addendum.

6.0 References

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7.0 Tables

Mgmt. Measure	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	occ
Min Gauge Size	3 ¹ / ₄ "	3 ³ / ₈ "	3 ^{17/32} "	3 ³ / ₈ "	3 ³ / ₈ "	3 ³ / ₈ "	3 ³ / ₈ "
Vent Rect.	1 ¹⁵ / ₁₆ x 5 ³ / ₄ "	2 x 5 ³ / ₄ "	2 ¹ / ₁₆ x 5 ³ / ₄ "	2 x 5 ³ / ₄ "	2 x 5 ³ / ₄ "	2 x 5 ³ / ₄ "	2 x 5 ³ / ₄ "
Vent Cir.	2 ⁷ / ₁₆ "	2 ⁵ / ₈ "	2 ¹¹ / ₁₆ "	2 ⁵ / ₈ "	2 ⁵ / ₈ "	2 ⁵ / ₈ "	2 ⁵ / ₈ "
V-notch requirement	Mandatory for all eggers	Mandatory for all legal size eggers	Mandatory for all eggers above 42°30'	Mandatory for all eggers in federal waters. No V- notching in state waters.	Mandatory for all eggers	None	None
V-notch Definition ¹ (possession)	Zero Tolerance	¹ / ₈ " with or w/out setal hairs ¹	¹ / ₈ " with or w/out setal hairs ¹	¹ / ₈ " with or w/out setal hairs ¹	¹ / ₈ " with or w/out setal hairs ¹	¹ / ₈ " with or w/out setal hairs ¹	State Permitted fisherman in state waters 1/4" without setal hairs
							Federal Permit holders ¹ / ₈ " with or w/out setal hairs ¹
Max. Gauge (male & female)	5″	5 ¼"	6 ³ / ₄ "	5 ¼"	5 ¼"	5 ¼"	State Waters none Federal Waters 6 ³ / ₄ "
Season Closure				April 30-May 31 ²	February 1-March 31 ³	Sept 8- Nov 28	February 1- April 30

Table 1. Existing LCMA specific management measures.

Table 2. GOM/GBK model-free indicators for the 2020 Stock Assessment. The left table shows the GOMspawning stock abundance, the right table shows GBK spawning stock abundance.

					VNING STO					
	SPAWNING STOCK ABUNDANCE Mean weight (g) per tow of mature females									
T							Mean wei			
Survey	NES		ME/		MA		mat	ure femal	25	
4004	fall	spring	fall	spring	fall	spring	6	NE	NESFC	
1981	175.32	400.28			502.65	430.53	Survey	fall	spring	
1982 1983	39.45	113.58			626.48	151.21	1981	707.14	69.71	
1985	206.03 234.64	234.21			844.76	67.08	1982	670.07	123.96	
1984	499.62	443.81 2771.23			593.77 919.56		1983	643.84	152.05	
1985		502.99					1984	397.33	45.17	
1986	267.97 85.35	497.40			231.88 194.34	112.97 148.62	1985	504.87	39.00	
1987	186.56	244.92			200.58	88.14	1986	491.96	307.05	
1988	325.69	244.92			293.61	230.26	1987	537.31	113.27	
1990		516.20			1048.72	230.28	1988	695.27	307.49	
	216.65						1989	933.18	161.43	
1991 1992	247.11 193.95	430.56 453.31			335.80 512.83	165.54 212.89	1990	761.64	103.62	
1992	284.34	453.31			120.59	212.89	1991	848.03	164.32	
1995	284.34 430.32	720.67					1992	817.25	213.11	
1994	430.32				783.17	285.01 171.71	1993	626.81	126.03	
1995		390.15			520.26		1994	774.61	41.77	
1998	734.25	872.53			569.39	156.53	1995	939.85	71.74	
1997	568.34	1083.76			235.18 282.79	114.78 170.21	1996	1051.09	482.61	
	381.81	1182.44					1997	754.00	62.46	
1999	1444.07	807.41	4400 55		365.53	282.12	1998	993.56	64.67	
2000	585.66	1281.05	4430.55	600.00	533.40 165.74	236.55	1999	1363.68	395.66	
2001	511.25	1498.42	2446.85	690.89		235.85	2000	945.69	132.57	
2002	1789.42	2022.04			324.34	175.73	2001	1756.38	313.41	
2003	985.93	2343.63	3949.63	1226.05	129.67	72.99	2002	2183.80	341.90	
2004	685.89	2773.35	3610.67	907.07	120.27	259.35	2003	1030.19	842.92	
2005	465.35	1670.29		1990.08	248.23	489.12	2004	1557.16	298.95	
2006	681.87 445.78	1810.96	3698.94	1327.93	240.27	410.97	2005	1404.20	491.00	
2007		1536.47	3163.24		176.95		2006	2123.43	465.72	
2008 2009	805.10	1894.91	4080.36	1107.00	559.70		2007	1859.53	728.26	
	1787.92	1864.92	6906.45	1747.30	630.52	219.83	2008	3074.33	1827.61	
2010	2850.60	2476.79	5793.51	1886.61	1424.75	211.52	2009	3703.99	1336.34	
2011 2012	2317.94	2089.39	6169.40 4174.85	2013.80	1268.44 889.87	267.51 124.81	2010	2120.51	1126.52	
	3215.29 3299.56	3516.38		2287.55			2011	4681.76	1113.11	
2013 2014		2499.71	5363.14	2007.92	1135.54	300.86	2012	2696.38	1510.08	
2014 2015	4979.28 3553.44	3083.09 3665.39	5891.58 8488.62	3010.73 2233.05	768.88 1947.04	382.81 418.46	2013	2530.26	1369.39	
2015	3553.44	3665.39 5142.42	8488.62 7691.01	2233.05	1947.04 3712.66	418.46 1119.26	2014	3012.69	1833.98	
							2015	3743.71	1509.13	
2017	3274.69	6566.80	4629.68 5242.34	2530.74 2005.07	2309.44 2782.55		2016	3020.98	2138.96	
2018	2093.20	3555.09	5242.54	2005.07	2182.35	550.68	2017	6627.18	3749.60	
2014- 2018	3518.57	4402.56	6388.65	2478.62	2304.11	607.10	2018	9630.86	725.09	
mean	2210.21	4402.30	0306.03	2470.02	2504.11	007.10	2014-2018	5207.09	1991.35	
mean							mean	5201.03	1551.55	
25+h	272.06	107 57	4015.00	1255 02	242.26	149.27				
25th median	272.06 539.79	487.57 1389.74	4015.00 4638.64		242.26 526.83	149.27 224.78	25th	755.91	124.47	
			4638.64 5842.54				median	1040.64	310.45	
75th	1789.05	2443.50	2042.34	2178.24	878.60	296.52	75th	2443.64	1045.56	

Appendix A. 2022 Annual Data Update of American Lobster GOM/GBK Stock Indicators

Background

An annual Data Update process between American lobster stock assessments was recommended during the 2020 stock assessment to more closely monitor changes in stock abundance. The objective of this process is to present information—including any potentially concerning trends—that could support additional research or consideration of changes to management. Data sets updated during this process are generally those that indicate exploitable lobster stock abundance conditions expected in subsequent years and include:

- YOY settlement indicators
- Trawl survey indicators, including recruit abundance (71-80 mm carapace length lobsters) and survey encounter rate
- Ventless trap survey sex-specific abundance indices (53 mm+ carapace length lobsters)

This is the second Data Update and provides an update of last year's review with the addition of 2021 data. Indicator status (negative, neutral, or positive – see table below) was determined relative to the percentiles of the stock assessment time series (i.e., data set start year through 2018).

Indicator	< 25 th percentile	Between 25 th and 75 th percentile	> 75 th percentile
YOY settlement (larval or YOY)	Negative	Neutral	Positive
Trawl survey recruit abundance	Negative	Neutral	Positive
Trawl survey encounter rate	Negative	Neutral	Positive
Ventless trap survey abundance	Negative	Neutral	Positive

The five-year means provided during the stock assessment (2014-2018) for terminal indicator status determinations were also updated with new years of data. This treatment of data is consistent with stock indicators provided during stock assessments (see Section 5 in the stock assessment report for more detail). As noted in last year's Data Update memo, ventless trap survey abundance indices were added to indicators used in the stock assessment for this Data Update process. Note that updated five-year means (2017-2021) for several trawl survey-based indicators remain impacted by covid-19 data collection disruptions. A change that impacted this year's update is a reduction in the spatial coverage of Massachusetts' Southern New England (statistical area 538) ventless trap survey due to reduced participation. This change necessitates dropping out data collected during earlier years from areas no longer sampled to calculate an index from a consistent survey footprint, resulting in changes to the indices from what was reviewed last year. Note that the updated index increased slightly in scale (the reduced footprint excludes most of the interior of Buzzards Bay), but the pattern over time is generally consistent with the previous index. Below are the results of the data updates by sub-stock.

Results

Gulf of Maine (GOM)

Overall, Gulf of Maine indicators show declines from time series highs observed during the stock assessment.

- YOY conditions showed improvements since the stock assessment, but were still not positive (Table 1 and Figure 1).
 - Updated five-year means were all neutral, indicating improvement since the stock assessment when two of the five-year means were negative (both southwest areas).

- 2021 values moved from neutral to negative conditions in all three northeast areas, reversing some improvements seen in previous years. The two most southwest areas remained in neutral conditions observed in 2020.
- Trawl survey recruit abundance indicators generally remained positive, but showed some sign of decline since the stock assessment (Table 2 and Figure 2).
 - One of the updated five-year means changed from positive to neutral. The others remained positive.
 - 2021 values for three of four inshore indicators were neutral and the only available 2020 value was also neutral, the first observed neutral values since 2014 or 2015 for these indicators.
 - Five of six indicators were not available for 2020 due to covid-19 sampling restrictions.
- Trawl survey encounter rates show deteriorating conditions inshore since the stock assessment (Table 3 and Figure 3).
 - All four updated five-year means for inshore indicators were neutral, whereas only one was neutral during the stock assessment. Updated five-year means for the two offshore indicators remain positive.
 - Five of six indicators were not available for 2020 due to covid-19 sampling restrictions.
- Ventless trap survey indices show abundance declining since the stock assessment (Table 4 and Figure 4).
 - Seven of eight updated five-year means were neutral and one was negative, compared to four positive means and no negative means during the stock assessment.
 - \circ $\;$ Two additional values in 2021 moved into negative conditions.
 - 2021 values for both sexes in statistical area 514 were among the lowest values observed during the time series.

Georges Bank (GBK)

Overall, Georges Bank indicators show conditions similar to during the stock assessment. Note that there are no YOY or VTS indicators for this sub-stock area.

- Trawl survey recruit abundance indicators showed conditions similar to during the stock assessment (Table 5 and Figure 5).
 - \circ Updated means for both indicators were neutral. This is unchanged from the stock assessment.
 - 2021 values were both positive and relatively high compared to other recent years.
 - No indicators were available for 2020 due to covid-19 sampling restrictions.
 - These indicators tend to be noisier than some of the other abundance indicators, with high interannual variability and lack of discernible trends.
- Trawl survey encounter rates showed declines in the fall since the stock assessment (Table 6 and Figure 6).
 - The updated mean for the fall indicator changed from positive to neutral, while the updated mean for the spring indicator remained positive.
 - No indicators were available for 2020 due to covid-19 sampling restrictions.

Southern New England (SNE)

Overall, Southern New England indicators show continued unfavorable conditions with some further signs of decline since the stock assessment.

• YOY conditions were negative across the stock with some decline since the stock assessment (Table 7 and Figure 7).

- Updated five-year means were all negative, whereas one of three was neutral during the stock assessment.
- Only one non-negative annual indicator has been observed since the stock assessment.
- No YOY have been caught during the MA survey for the last seven years.
- Trawl survey recruit abundance indicators generally showed conditions similar to during the stock assessment with some slight decline offshore (Table 8 and Figure 8).
 - The updated five-year mean for the spring indicator offshore changed from neutral to negative. Other updated means were unchanged, with five inshore indicators remaining negative and the other two indicators (one inshore and one offshore) remaining neutral.
 - Six of eight indicators were not available for 2020 due to covid-19 sampling restrictions.
- Trawl survey encounter rates showed deteriorating conditions since the stock assessment (Table 9 and Figure 9).
 - Updated five-year means for all eight indicators were negative, with two changing from neutral to negative since the stock assessment.
 - 2021 values for all indicators were negative, the first year these uniform conditions have occurred during the time series.
 - Six of eight indicators were not available for 2020 due to covid-19 sampling restrictions.
- Ventless trap survey indices showed conditions similar to conditions during the stock assessment (Table 10 and Figure 10).
 - Updated five-year means were all neutral, unchanged from the stock assessment.
 - All annual values since the stock assessment have been negative in statistical area 539, but higher values observed in 2018 have kept the five-year means neutral.
 - The female index calculated with reduced survey area in statistical area 538 was similar to the index from the historical survey area reviewed last year. The 2018 and 2019 values for the male index changed from neutral for the historical survey area to negative for the reduced survey area.
 - It is important to note that the ventless trap survey has only taken place during depleted stock conditions coinciding with an adverse environmental regime, so interannual variability can be misleading without the context of a longer time series encompassing varying stock conditions.

Tables and Figures

YOUNG-OF-YEAR INDICES							
Survey		MA					
	511	512	513 East	513 West	514		
1981							
1982							
1983							
1984							
1985							
1986							
1987							
1988							
1989			1.64				
1990			0.77				
1991			1.54				
1992			1.30				
1993			0.45				
1994 1995		0.02	1.61		0.01		
1995 1996		0.02 0.05	0.66 0.47		0.91		
1996					0.10		
1997		0.05 0.00	0.46 0.14		0.10		
1998		0.00	0.65		0.43		
2000	0.00	0.04	0.03	0.17	0.43		
2000	0.24	0.43	2.08	1.17	0.39		
2002	0.13	0.29	1.38	0.85	1.00		
2003	0.22	0.27	1.75	1.22	0.75		
2004	0.18	0.36	1.75	0.67	1.02		
2005	1.42	1.25	2.40	1.12	1.06		
2006	0.49	1.06	1.57	1.08	0.45		
2007	0.59	1.11	2.23	1.30	1.27		
2008	0.32	0.59	1.27	1.10	0.33		
2009	0.66	0.33	1.51	0.48	0.17		
2010	0.16	0.64	1.25	0.63	0.44		
2011	0.41	0.98	2.33	0.90	0.58		
2012	0.44	0.62	1.27	0.30	0.08		
2013	0.10	0.20	0.48	0.12	0.00		
2014	0.16	0.47	1.04	0.42	0.11		
2015	0.15	0.22	0.42	0.03	0.00		
2016	0.13	0.21	0.42	0.14	0.08		
2017	0.21	0.36	0.65	0.23	0.08		
2018	0.27	0.34	0.62	0.22	0.03		
2014-2018	0.18	0.32	0.63	0.21	0.06		
mean							
2019	0.43	0.64	0.94	0.45	0.06		
2020	0.29	0.51	1.06	0.33	0.19		
2021	0.06	0.12	0.38	0.28	0.28		
2017-2021 mean	0.25	0.39	0.73	0.30	0.13		
25+1-	0.45	0.40	0.54	0.22	0.00		
25th	0.15	0.18	0.51	0.23	0.08		
median	0.22	0.34	1.26	0.63	0.33		
75th	0.42	0.60	1.60	1.09	0.67		

Table 1. GOM abundance indicators: YOY indices.

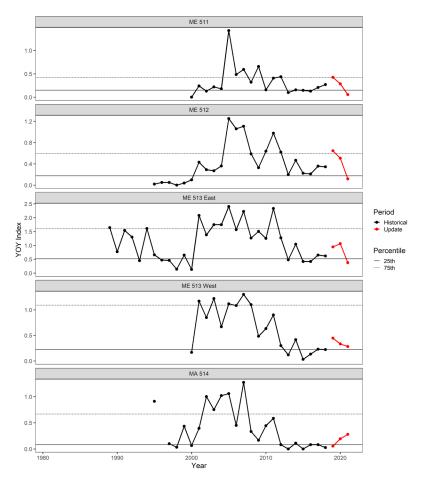
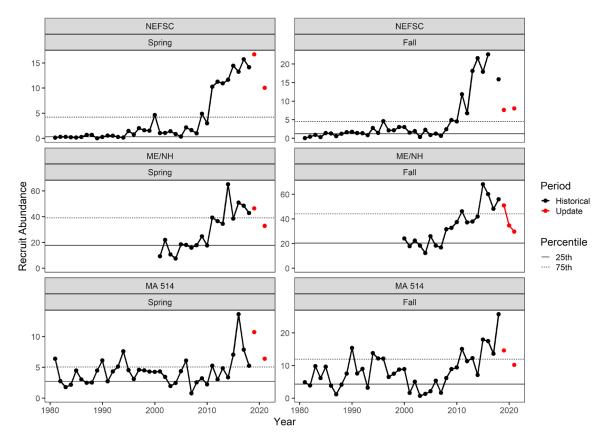


Figure 1. GOM abundance indicators: YOY indices.

	RECRUIT ABUNDANCE (SURVEY)								
Abunda	ance of lo	bsters 71		-	combined	d)			
Curricou	NEI	FSC	ME/	(NH	MA	514			
Survey	Spring	Fall	Spring	Fall	Spring	Fall			
1981	0.13	0.06			6.38	4.84			
1982	0.29	0.42			2.74	3.85			
1983	0.28	0.90			1.76	9.76			
1984	0.20	0.31			2.15	6.13			
1985	0.14	1.41			4.48	9.60			
1986	0.27	1.29			3.01	3.80			
1987	0.67	0.57			2.47	1.16			
1988	0.67	1.21			2.52	4.12			
1989 1990	0.00 0.27	1.61 1.76			4.48 6.11	7.51 15.36			
1990	0.27	1.76			2.73	7.55			
1991	0.50	1.41			4.31	8.95			
1993	0.25	0.86			5.12	3.19			
1994	0.25	2.75			7.59	13.77			
1995	1.45	1.44			4.54	12.12			
1996	0.76	4.59			3.09	12.10			
1997	2.02	2.12			4.59	6.46			
1998	1.59	2.16			4.50	7.47			
1999	1.51	3.01			4.29	8.73			
2000	4.64	3.01		24.09	4.24	8.87			
2001	1.05	1.51	9.28	17.81	4.32	1.58			
2002	1.08	1.91	22.00	22.41	3.43	5.00			
2003	1.41	0.36	10.65	18.32	1.96	0.66			
2004	0.84	2.26	7.55	12.29	2.46	1.30			
2005	0.34	0.87	18.51	25.90	4.35	2.11			
2006	2.17	1.27	18.07	18.30	6.09	5.30			
2007	1.62	0.64	15.91	16.82	0.77	1.61			
2008	0.99	2.41	17.88	31.61	2.54	6.12			
2009 2010	4.88 2.98	4.90	24.72	32.67 37.35	3.19	8.88			
2010	10.27	4.53 11.83	17.66 39.25	46.09	2.22 5.24	9.39 15.04			
2011	11.25	6.74	36.55	37.12	3.03	11.30			
2012	10.93	18.12	34.50	37.12	4.83	12.20			
2013	11.66	21.54	65.07	41.95	3.35	7.06			
2015	14.44	17.89	38.51	67.99	7.05	17.91			
2016	13.25	22.54	50.83	60.07	13.61	17.44			
2017	15.74	\geq	48.42	48.13	7.85	13.58			
2018	14.15	15.87	42.77	55.84	5.25	25.69			
2014-2018	12.04	10.40	40.42	E 4 00	7.40	10.24			
mean	13.84	19.46	49.12	54.80	7.42	16.34			
2019	16.69	7.62	46.37	50.85	10.69	14.59			
2020	\triangleright	\triangleright	\geq	34.65	\triangleright	\triangleright			
2021	10.04	8.04	32.86	29.64	6.39	10.16			
2017-2021	14.15	10 51	12 01	42.02	7 55	16.01			
mean	14.15	10.51	42.61	43.82	7.55	16.01			
25.1	0.00	4.24	47 70	20.27	2 72	4.20			
25th	0.30	1.21	17.72	20.37	2.73	4.30			
median	1.07	1.76	23.36	32.67	4.30 5.05	7.53			
75th	4.23	4.53	39.07	44.02	5.05	11.90			

Table 2. GOM abundance indicators: trawl survey recruit abundance.





SURVEY LOBSTER ENCOUNTER RATE							
		-	of postive				
Survey	NEI		ME/	1	MA 514		
	Spring	Fall	Spring	Fall	Spring	Fall	
1981	0.44	0.25			0.86	0.72	
1982	0.34	0.18			0.50	0.70	
1983	0.26	0.33			0.76	0.76	
1984	0.28	0.36			0.76	0.76	
1985	0.38	0.49			0.71	0.67	
1986	0.33	0.47			0.68	0.83	
1987	0.43	0.24			0.85	0.54	
1988	0.31	0.30			0.76	0.58	
1989	0.19	0.35			0.78	0.95	
1990	0.41	0.32			0.86	0.95	
1991	0.42	0.32			0.87	0.94	
1992	0.40	0.24			0.93	0.77	
1993	0.41	0.39			0.97	0.82	
1994	0.45	0.40			1.00	0.93	
1995	0.41	0.37			0.93	0.93	
1996	0.54	0.54			0.91	0.95	
1997	0.64	0.35			0.93	0.86	
1998	0.52	0.40			0.76	0.69	
1999	0.51	0.42			0.73	0.91	
2000	0.63	0.42		0.94	0.93	0.98	
2001	0.57	0.40	0.88	0.86	0.93	0.72	
2002	0.75	0.53	0.94	0.95	0.91	0.73	
2003	0.69	0.44	0.92	0.85	0.82	0.55	
2004	0.87	0.31	0.89	0.86	0.84	0.56	
2005	0.77	0.36	0.95	0.91	0.95	0.67	
2006	0.72	0.60	0.93	0.93	0.91	0.88	
2007	0.72	0.43	0.97	0.85	0.51	0.54	
2008	0.84	0.49	0.92	0.86	0.83	0.75	
2009	0.82	0.63	0.98	0.92	0.89	0.87	
2010	0.85	0.75	0.98	0.96	0.87	0.98	
2011	0.83	0.74	0.99	0.96	0.89	0.85	
2012	0.86	0.78	0.98	0.98	0.91	0.95	
2013	0.87	0.73	1.00	0.93	0.96	0.95	
2014	0.90	0.71	1.00	0.99	0.79	0.96	
2015	0.93	0.69	1.00	0.96	0.98	0.95	
2016	0.94	0.75	1.00	0.96	0.96	0.97	
2017	0.86	\succ	0.99	0.94	0.84	0.98	
2018	0.86	0.71	0.98	0.96	0.84	0.90	
2014-2018 mean	0.90	0.72	0.99	0.96	0.88	0.95	
2019	0.83	0.71	0.99	0.95	0.85	0.92	
2020	\geq	\succ	\geq	0.96	\geq	\geq	
2021	0.90	0.75	1.00	0.91	0.86	0.90	
2017-2021 mean	0.86	0.72	0.99	0.94	0.85	0.93	
	1						
25th	0.41	0.35	0.93	0.89	0.78	0.72	
median	0.60	0.42	0.98	0.94	0.87	0.86	
75th	0.84	0.60	0.99	0.96	0.93	0.95	

Table 3. GOM abundance indicators: trawl survey encounter rate.

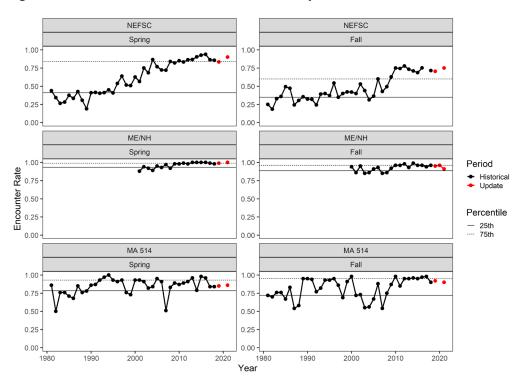


Figure 3. GOM abundance indicators: trawl survey encounter rate.

VENTLESS TRAP ABUNDANCE									
Abundance of lobsters > 53 mm CL									
6	51	1	512		51	513		514	
Survey	Female	Male	Female	Male	Female	Male	Female	Male	
1981									
1982									
1983									
1984									
1985									
1986									
1987									
1988									
1989									
1990									
1991									
1992									
1993									
1994									
1995									
1996									
1997									
1998									
1999									
2000									
2001									
2002									
2003									
2004									
2005									
2006	7.65	5.34	6.87	5.38	5.73	4.37	3.10	3.40	
2007	5.06	3.91	3.95	3.83	5.82	4.35	1.85	1.84	
2008	4.94	3.87	5.78	4.95	5.78	4.97	2.77	2.51	
2009	3.60	2.65	6.31	5.35	6.89	5.53	2.72	2.66	
2010	5.66	3.90	6.95	5.69	6.61	5.27	2.49	2.22	
2011	8.70	6.52	11.10	8.48	7.32	5.60	3.47	2.60	
2012	10.95	7.64	12.06	9.47	11.40	7.72	5.21	4.52	
2013	11.14	7.95	11.87	8.64	9.36	6.49	\geq	\geq	
2014	10.38	6.63	11.92	8.04	7.74	4.96	3.15	2.35	
2015	8.47	4.63	10.39	7.70	8.54	5.48	4.01	3.16	
2016	14.59	9.15	14.34	10.75	10.78	7.56	4.79	3.56	
2017	11.69	7.07	11.61	8.52	8.46	5.56	3.38	2.45	
2018	15.10	9.43	11.26	8.23	9.57	6.37	3.47	2.43	
2014-2018	12.05	7.38	11.90	8.65	9.02	5.99	3.76	2.79	
mean									
2019	12.93	8.27	8.22	5.94	8.68	5.25	2.85	1.93	
2020	7.66	5.47	7.91	5.96	9.29	6.61	2.50	1.69	
2021	7.34	5.44	5.94	5.23	8.24	5.93	1.77	1.37	
2017-2021 mean	10.94	7.14	8.99	6.78	8.85	5.94	2.80	1.97	
	1		r – – – –		r	[r	[
25th	5.66	3.91	6.87	5.38	6.61	4.97	2.76	2.41	
median	8.70	6.52	11.10	8.04	7.74	5.53	3.27	2.56	
75th	11.14	7.64	11.87	8.52	9.36	6.37	3.61	3.22	

Table 4. GOM abundance indicators: ventless trap survey abundance.

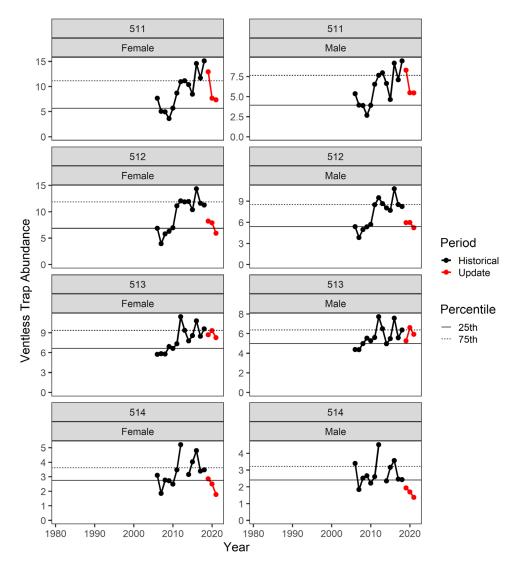


Figure 4. GOM abundance indicators: ventless trap survey abundance.

Table 5. GBK abundance indicators: trawl surve	y recruit abundance.
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RECRUIT ABUNDANCE (SURVEY)								
Abundance of lobsters 71 - 80 mm								
CL (sexes combined)								
Survey	NEI	SC						
Survey	Spring	Fall						
1981	0.08	0.28						
1982	0.18	0.41						
1983	0.16	0.33						
1984	0.09	0.40						
1985	0.19	0.26						
1986	0.57	0.64						
1987	0.43	0.54						
1988	0.09	0.36						
1989	0.04	0.23						
1990	0.44	0.47						
1991	0.08	0.34						
1992 1993	0.13	0.62						
	0.50	0.22						
1994	0.01	0.13						
1995	0.03	0.14						
1996	0.00	0.35						
1997	0.06	0.90						
1998	0.01	0.33						
1999 2000	0.07	0.29						
	0.27	0.33						
2001 2002	0.47	0.45						
	0.06	0.56 0.16 0.18 0.13						
2003 2004	0.29							
2004	0.04							
2005	0.09	0.13						
2008	0.18	0.12						
2007	0.05							
2008	0.05	0.17 0.33						
2009	0.30	0.35						
2010	0.09	0.35						
2011	0.09	0.35						
2012	0.13	0.17						
2013	0.14	0.24						
2014	0.10	0.21						
2015	0.00	0.13						
2010	0.15							
2017	0.33	0.22						
2014-2018	0.0.1	0.22						
2014-2018 mean	0.15	0.25						
2019	0.16	0.13						
2019	0.16	0.15						
2020	0.41	0.43						
2021	0.41	0.43						
2017-2021 mean	0.24	0.26						
medii								
25th	0.06	0.18						
median	0.08	0.18						
75th	0.11	0.29						

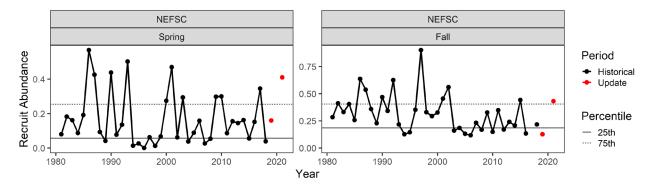


Figure 5. GBK abundance indicators: trawl survey recruit abundance.

SURVEY LOBSTER ENCOUNTER RATE							
Proportion of postive tows							
Survey	NEI Spring	FSC Fall					
1981	0.23	0.52					
1982	0.23	0.43					
1983	0.18	0.38					
1984	0.12	0.34					
1985	0.19	0.35					
1986	0.27	0.36					
1987	0.18	0.35					
1988	0.34	0.40					
1989	0.14	0.38					
1990	0.18	0.44					
1991	0.19	0.45					
1992	0.26	0.49					
1993	0.22	0.36					
1994	0.11	0.38					
1995	0.14	0.30					
1996	0.14	0.42					
1997	0.10	0.48					
1998	0.10	0.48					
	0.10						
1999		0.58					
2000	0.23	0.41					
2001	0.23	0.49					
2002	0.29	0.55					
2003	0.27	0.44 0.53 0.58					
2004	0.18						
2005	0.16						
2006	0.24	0.54					
2007	0.26	0.46					
2008	0.29	0.55					
2009	0.34	0.54					
2010	0.38	0.62					
2011	0.30	0.69					
2012	0.35	0.57					
2013	0.33	0.65					
2014	0.37	0.61					
2015	0.27	0.59					
2016	0.45	0.55					
2017	0.40						
2018	0.29	0.59					
2014-2018	0.36	0.58					
mean							
2019	0.36	0.57					
2020	\succ	\succ					
2021	0.41	0.48					
2017-2021 mean	0.37	0.54					
25th	0.18	0.40					
median	0.23	0.48					
75th	0.29	0.55					

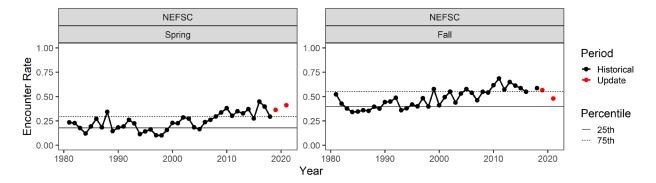
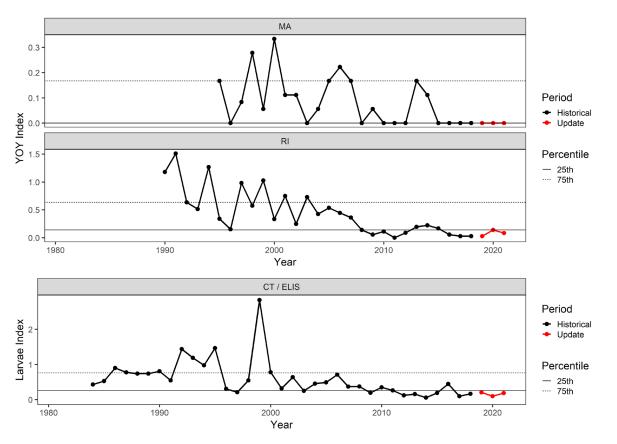
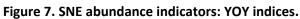




Table 7. SNE abundance indicators: YOY indices.

YOUNG-OF-YEAR INDICES									
Survey	МА	RI	CT / ELIS Larvae						
1981			Luivue						
1981									
1982									
1984			0.43						
1985			0.53						
1986			0.90						
1987			0.78						
1988			0.74						
1989			0.74						
1990		1.18	0.81						
1991		1.51	0.55						
1992		0.63	1.44						
1993		0.51	1.19						
1994		1.27	0.98						
1995	0.17	0.34	1.46						
1996	0.00	0.15	0.31						
1997	0.08	0.98	0.21						
1998	0.28	0.57	0.55						
1999	0.06	1.03	2.83						
2000	0.33	0.33	0.78						
2001	0.11	0.75	0.32						
2002	0.11	0.25	0.64						
2003	0.00	0.73	0.25						
2004	0.06	0.42	0.45						
2005	0.17	0.54	0.49						
2006	0.22	0.44	0.71						
2007	0.17	0.36	0.37						
2008	0.00	0.14	0.37						
2009	0.06	0.06	0.19						
2010	0.00	0.11	0.35						
2011	0.00	0.00	0.26						
2012	0.00	0.09	0.12						
2013	0.17	0.19	0.16						
2014	0.11	0.22	0.06						
2015	0.00	0.17	0.19						
2016	0.00	0.06	0.45						
2017	0.00	0.03	0.10						
2018	0.00	0.03	0.17						
2014-2018	0.02	0.10	0.19						
mean									
2019	0.00	0.03	0.21						
2020	0.00	0.14	0.10						
2021	0.00	0.08	0.19						
2017-2021 mean	0.00	0.06	0.15						
25th	0.00	0.14	0.26						
median	0.06	0.34	0.45						
75th	0.17	0.63	0.76						





RECRUIT ABUNDANCE (SURVEY)										
	Abundar				CL (sexes	combine	ed)			
Survey	NEF	-SC	м	A	R	1	с	СТ		
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall		
1981	0.10	0.89	0.65	0.07	0.89	1.31				
1982	0.74	0.74	0.10	0.04	0.26	0.64				
1983	0.45	0.62	0.09	0.04	0.94	0.43				
1984	0.10	0.81	0.42	0.01	1.03	1.35	10.09	6.80		
1985	1.99	1.01	0.34	0.09	0.28	0.97	3.08	3.93		
1986	0.18	0.59	0.17	0.20	0.91	1.28	2.77	5.76		
1987	1.04	0.45	0.26	0.17	0.79	3.14	2.93	6.86		
1988	0.55	0.60	0.24	0.16	0.47	4.05	1.85	4.88		
1989	0.09	1.65	0.14	0.43	0.90	3.26	4.86	5.28		
1990	0.71	0.83	2.29	0.31	2.17	2.69	6.89	7.74		
1991	0.31 0.19	0.51	1.18 0.10	0.87	4.77	3.10	10.83	10.32		
1992 1993	0.19	0.94 0.42	0.10	0.57 0.52	0.62 7.81	1.97 8.29	10.31 7.78	10.65 15.18		
1993	0.39	0.42	0.25	0.32	1.00	3.88	5.07	11.51		
1994	0.13	0.58	1.14	0.42	1.33	4.50	12.13	11.31		
1996	0.40	2.39	0.40	0.32	1.60	6.55	11.37	11.20		
1997	1.64	1.60	1.45	0.12	2.58	6.10	15.42	24.99		
1998	0.78	1.06	1.09	0.11	1.63	3.24	24.06	12.72		
1999	2.43	0.66	0.75	0.19	1.71	2.07	24.57	12.96		
2000	0.67	1.27	0.56	0.13	1.54	1.83	13.37	8.27		
2001	0.39	0.45	0.18	0.03	2.97	2.17	10.77	7.41		
2002	1.63	0.39	0.34	0.00	2.68	0.73	8.07	2.75		
2003	0.34	0.33	0.07	0.00	0.29	0.93	3.52	4.08		
2004	0.27	0.28	0.05	0.00	1.86	1.48	2.38	3.37		
2005	0.11	0.24	0.08	0.00	1.07	2.53	2.26	1.54		
2006	0.19	0.32	0.08	0.03	3.63	2.24	2.02	1.38		
2007	0.19	0.35	0.08	0.00	0.68	2.68	2.65	1.12		
2008	0.21	0.29	0.16	0.01	0.64	2.95	2.20	1.27		
2009	0.15	0.35	0.16	0.05	1.14	1.36	1.20	1.33		
2010	0.21	0.73	0.06	0.18	0.44	1.21	1.26	\geq		
2011	0.10	0.64	0.18	0.00	0.42	1.02	0.43	0.18		
2012	0.11	0.99	0.07	0.21	0.30	0.18	0.44	0.08		
2013	0.23	0.44 0.67	0.11 0.04	0.04	0.16	0.02	0.23	0.06		
2014 2015	0.03	0.87	0.04 0.07	0.00 0.30	0.02 0.05	0.14 0.37	0.15 0.15	0.05 0.06		
2015	0.05	0.28	0.07	0.30	0.05	0.37	0.15	0.00		
2010	0.83	0.03	0.03	0.14	0.14	0.23	0.10	0.00		
2017	0.10	0.38	0.13	0.10	0.14	0.68	0.00	0.00		
2014-2018	0.00	0.50	0.02	0.01	0.10	0.00	0.00	0.01		
mean	0.26	0.51	0.06	0.12	0.19	0.37	0.10	0.03		
2019	0.06	0.32	0.01	0.02	0.52	0.50	0.03	0.00		
2020	$>\!$	\succ	$>\!\!\!>$	\geq	0.23	0.32	\searrow	\succ		
2021	0.01	0.59	0.01	0.00	0.27	0.07	0.03	0.00		
2017-2021										
mean	0.06	0.43	0.04	0.05	0.27	0.40	0.02	0.00		
25th	0.11	0.38	0.08	0.02	0.42	0.78	1.23	1.16		
median	0.23	0.61	0.17	0.10	0.91	1.65	2.93	4.48		
75th	0.67	0.83	0.42	0.20	1.62	3.07	10.20	9.81		

Table 8. SNE abundance indicators: trawl survey recruit abundance.

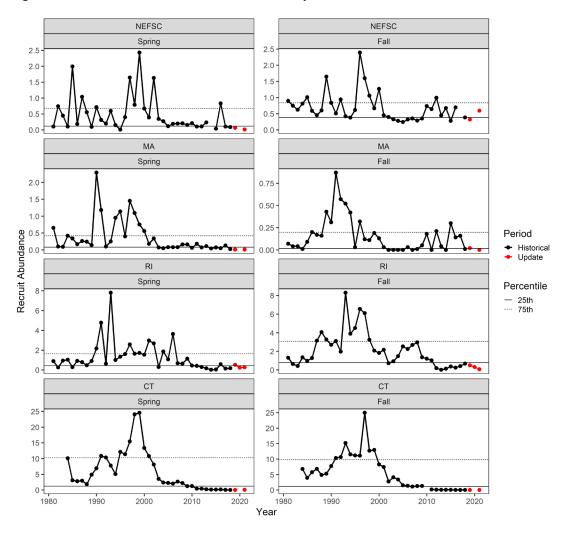


Figure 8. SNE abundance indicators: trawl survey recruit abundance.

SURVEY LOBSTER ENCOUNTER RATE										
	•	Pro	portion o	of postive	e tows					
Survey	NEF	SC	м	A	R	I	СТ			
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall		
1981	0.18	0.47	0.38	0.15	0.49	0.41				
1982	0.26	0.35	0.28	0.21	0.30	0.43				
1983	0.14	0.26	0.21	0.16	0.46	0.37				
1984	0.08	0.32	0.40	0.18	0.59	0.44	0.63	0.76		
1985	0.21	0.34	0.51	0.22	0.31	0.50	0.57	0.69		
1986	0.17	0.25	0.39	0.38	0.64	0.46	0.67	0.61		
1987	0.13	0.23	0.28	0.18	0.35	0.47	0.63	0.76		
1988	0.09	0.28	0.39	0.21	0.49	0.55	0.65	0.66		
1989	0.13	0.40	0.50	0.33	0.52	0.57	0.75	0.63		
1990	0.14	0.44	0.66	0.44	0.64	0.53	0.73	0.76		
1991	0.14	0.33	0.41	0.39	0.77	0.69	0.81	0.77		
1992	0.22	0.34	0.51	0.23	0.40	0.57	0.77	0.68		
1993	0.12	0.27	0.54	0.26	0.50	0.71	0.73	0.75		
1994	0.09	0.25	0.51	0.20	0.58	0.57	0.73	0.74		
1995	0.05	0.35	0.44	0.12	0.55	0.67	0.77	0.68		
1996	0.10	0.39	0.30	0.16	0.79	0.76	0.66	0.78		
1997	0.25	0.28	0.45	0.21	0.75	0.71	0.71	0.81		
1998	0.12	0.34	0.54	0.13	0.59	0.55	0.83	0.71		
1999	0.22	0.28	0.41	0.21	0.76	0.59	0.78	0.79		
2000	0.13	0.31	0.45	0.15	0.68	0.63	0.81	0.73		
2001	0.21	0.25	0.28	0.18	0.65	0.60	0.77	0.58		
2002	0.19	0.24	0.28	0.03	0.61	0.45	0.73	0.59		
2003	0.11	0.26	0.14	0.03	0.51	0.40	0.71	0.64		
2004	0.10	0.19	0.28	0.03	0.54	0.50	0.61	0.66		
2005	0.08	0.19	0.34	0.15	0.49	0.45	0.63	0.54		
2006	0.14	0.23	0.42	0.03	0.79	0.62	0.61	0.51		
2007	0.13	0.21	0.34	0.10	0.44	0.54	0.70	0.53		
2008	0.10	0.22	0.32	0.10	0.55	0.52	0.63	0.65		
2009	0.17	0.32	0.50	0.05	0.57	0.40	0.49	0.55		
2010	0.12	0.33	0.22	0.24	0.47	0.45	0.54	\nearrow		
2011	0.13	0.35	0.17	0.05	0.30	0.23	0.46	0.28		
2012	0.13	0.34	0.17	0.15	0.27	0.16	0.43	0.20		
2013	0.10	0.28	0.18	0.08	0.20	0.09	0.28	0.15		
2014		0.26	0.13	0.08	0.07	0.23	0.26	0.10		
2015	0.06	0.27	0.10	0.05	0.12	0.16	0.27	0.10		
2016	0.15	0.25	0.08	0.11	0.30	0.14	0.25	0.03		
2017	0.08	0.20	0.07	0.16	0.16	0.23	0.08	0.03		
2018	0.08	0.29	0.11	0.06	0.09	0.18	0.09	0.01		
2014-2018 mean	0.09	0.27	0.10	0.09	0.15	0.19	0.19	0.05		
2019	0.05	0.26	0.05	0.11	0.16	0.11	0.09	0.00		
2020	\searrow	\succ	\searrow	\succ	0.16	0.11	\searrow	\succ		
2021	0.04	0.18	0.07	0.00	0.20	0.12	0.06	0.03		
2017-2021	0.06	0.24	0.08	0.08	0.15	0.16	0.08	0.02		
mean	0.00	0.24	0.08	0.08	-0.15	0.10	0.08	0.02		
25:1		0.05	0.04	0.00	0.00	0.10	0.50	0.50		
25th	0.10	0.25	0.21	0.09	0.32	0.40	0.52	0.52		
median	0.13	0.28	0.34	0.16	0.51	0.49	0.65	0.64		
75th	0.17	0.34	0.45	0.21	0.60	0.57	0.73	0.74		

Table 9. SNE abundance indicators: trawl survey encounter rate.

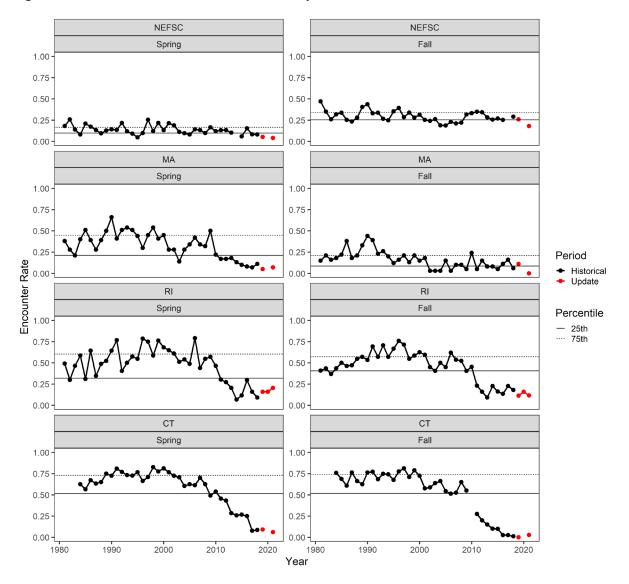
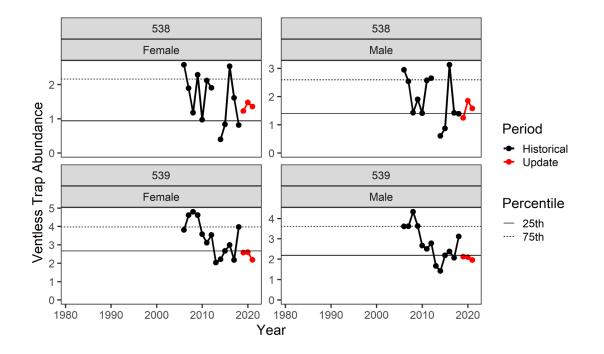


Figure 9. SNE abundance indicators: trawl survey encounter rate.

Table 10. SNE abundance indicators: ventless trap survey abundance.

VENTLESS TRAP ABUNDANCE										
Α	Abundance of lobsters ≥ 53 mm CL									
Survey	53	53	9							
Survey	Female Male		Female	Male						
1981										
1982										
1983										
1984										
1985										
1986										
1987										
1988										
1989										
1990										
1991										
1992 1993										
1995										
1995										
1996										
1997										
1998										
1999										
2000										
2001										
2002										
2003										
2004										
2005										
2006	2.58	2.95	3.81	3.60						
2007	1.89	2.54	4.61	3.61						
2008	1.18	1.43	4.80	4.32						
2009	2.29	1.90	4.61	3.62						
2010 2011	0.97 2.12	1.41 2.58	3.57	2.67 2.50						
2011	1.90	2.58	3.11 3.53	2.30						
2012	1.50	2.05	2.03	1.67						
2014	0.40	0.61	2.22	1.42						
2015	0.84	0.87	2.66	2.18						
2016	2.53	3.13	2.99	2.38						
2017	1.61	1.43	2.17	2.06						
2018	0.82	1.39	3.97	3.12						
2014-2018	1.24	1.48	2.80	2.23						
mean	1.24	1.40		2.25						
2019	1.23	1.25	2.57	2.12						
2020	1.47	1.85	2.60	2.10						
2021	1.36	1.58	2.19	1.95						
2017-2021	1.30	1.50	2.70	2.27						
mean										
25th	0.94	1.40	2.66	2.18						
median	1.75	1.67	3.53	2.67						
75th	2.16	2.60	3.97	3.60						

Figure 10. SNE abundance indicators: ventless trap survey abundance.



Appendix B. Analysis of alternate minimum and maximum sizes as management options for Lobster Management Areas in the Gulf of Maine. Report to the ASFMC Lobster TC and PDT.

Burton Shank and Jeff Kipp

Sept. 9, 2021

The Lobster TC provided analysis to the ASFMC Lobster Board ahead of the Spring 2021 meeting with estimated outcomes to the Gulf of Maine / Georges Bank lobster fishery given the implementation of alternative management measures (min and max gauge size), including changes to total weight of lobsters landed, number of lobsters landed, Spawning Stock Biomass (SSB) and Exploitation. The analysis included an attempt to examine how fisheries in different LCMAs would be affected though the population simulation model was not re-parameterized for each LCMA. In discussions, we concluded that the simulations for LCMA1 were probably reasonably accurate because:

- Many of the inputs for the simulations are taken from the 2020 stock assessment. Because the vast majority of the landings come from LCMA1, the stock assessment parameters are essentially already tuned to the parameters of the LCMA1 fishery.
- 2. LCMA1 is primarily a recruitment-based fishery in inshore or nearshore habitats and, therefore, likely to be representative of the full stock model.

However, there was concern that the offshore fishery in Lobster Management Area 3 was considerably different from the full stock model and, thus, may have inaccurate outcomes due to a mis-parameterized simulation model. The parameters for the Outer Cape Cod fishery are probably somewhere between LCMA1 and LCMA3 as it consists of both a resident lobster population and a seasonally-migrating population, moving between inshore and offshore habitats.

To address these differences between the LCMAs in population simulations, we performed the following:

- 1. For the LCMA1 simulations, we used the stock assessment parameters as the inputs.
- 2. For LCMA3 simulations, we attempted to manually tune the population simulation model to match the catch characteristics of the LCMA3 fishery, under the assumption that a simulation model that could reproduce the catch characteristics of the fishery may more accurately project changes in the fishery given changing management measures.
- 3. For the OCC simulations, we ran two sets of simulations, using the input parameters for both LCMA1 and LCMA3 under the assumption that this bounds the dynamics we might see in OCC.

For all simulations, populations were initiated with zero abundance and run for 50 years with constant recruitment to allow population abundances and length comps to reach equilibrium.

The equilibrium populations were then compared across the various legal selectivity scenarios to determine the effect of these different management alternatives.

For a simple, model-free analysis of the fishery catch composition for LCMA1 and LCMA3, we calculated the cumulative proportion of catch by weight at length by converting catch-at-size to weight-at-size and weighting for unequal sex ratios and seasonality of landings.

LCMA1 Simulations

The input parameters for the LCMA1 simulations were primarily drawn from the 2020 stock assessment. This includes the recruitment seasonality, length composition and sex ratio, growth model, gear, legal and conservation selectivities and mean estimated fishing mortality from the terminal years.

LCMA1 Results

The cumulative catch weight-by-length curve indicates that the mean size of lobsters landed in the LCMA1 fishery is within the smallest legal size bin (83-91mm, Figure 1). Nearly 90% of the catch are below 100mm CL and only about 2% of the catch are over 120mm CL. This supports the perspective that LCMA1 landings involve a narrow range of small lobster sizes and is primarily a recruitment-dependent fishery.

Increasing the minimum legal size is projected to decrease the total number of lobsters landed but result in a net increase in yield-per-recruit (YPR) and total weight of catch (Table 1 and 2). However, the magnitude of these changes are small enough that they may not be detectable in the actual fishery given inter-annual variations in recruitment and catch. Changing the maximum legal size is projected to have very little effect on either catch number or weight.

Note that these are purely yield-per-recruit simulations so recruitment subsidies from increased SSB are not assumed in the calculations of catch weight or number so, thus, probably represent a conservative, lower bound. A less conservative upper bound would be the product of change in YPR and the change in SSB.

Increasing the minimum legal size is projected to result in large increases in SSB (Table 3). Minimum legal sizes that approach or exceed the size of maturity produce increasing returns on SSB as this allows a much larger portion of the population to reproduce at least once. Thus, increasing minimum legal size to 88mm is projected to result in a near doubling in SSB. Increasing maximum size can result in a large decrease SSB, particularly as the minimum legal size increases and more of the population survives to reach the current maximum legal size.

Increasing legal size would result in moderate to large decreases in exploitation as more of the stock becomes protected (Table 4) with exploitation decreasing by nearly 30% at a minimum legal size of 88mm. As with catch weight and number, changing maximum legal size has little effect on exploitation rates as these sizes represent a very small portion of the LCMA1 population.

LCMA3 Simulations

We first analyzed the port and sea sampling data provided for the 2020 benchmark assessment but constrained to LCMA3 to estimate fishery characteristics, including catch size composition, catch sex ratio, and conservation selectivity (discarding due to egg-bearing or V-notch status).

We then specified the conservation selectivity from the biosamples and current legal selectivity appropriate for LCMA3 in the population simulation model and iteratively tuned the following parameters:

- 1. Fully-selected fishing mortality, assumed constant across seasons
- 2. Recruitment sex ratio
- 3. Recruitment size composition for each sex.

For a given tuning run, the population simulation model was provided an updated set of input parameters and projected forward 25 year to reach equilibrium. The resulting catch composition from the model run was then compared to the average catch composition from the last five years of the biosamples to determine accuracy of the simulation models. Comparisons were conducted both visually for obvious lack-of-fit and by correlating the simulated and observed catch compositions. Correlations were performed on both the catch proportions and logit-transformed catch proportions, the latter to place more emphasis on length compositions that occur in smaller proportions.

Once the model was tuned to perform as well as might be expected, given minor, seasonal lackof-fit that could not be easily resolved, the simulation model was then run with the tuned parameters for all combinations of proposed minimum and maximum size limits. We then summarized the outputs from the different simulations as values relative to the current minimum and maximum size regulations in place for LCMA3.

<u>Results</u>

The cumulative catch weight-by-length curve indicates that 110 mm carapace length is the approximate mean size of lobsters landed in the LCMA3 fishery (Figure 1). However, the cumulative curve is nearly linear from 90mm through 130mm, indicating lobsters across this size range are about equally important to the landings of this fishery. Lobsters less than about 92mm constitute the lower 10% quantile of landings while lobsters greater than 136mm constitute the upper 10% quantile with lower and upper quartiles around 98mm and 123mm respectively. This suggests that LCMA3 landings include a broad range of lobster sizes, unlike typical inshore lobster fisheries that are primarily recruitment-driven.

The final tuned parameters included a quarterly fishing mortality of 0.1 (0.4 total annual mortality) and a 70:30 female to male recruitment sex ratio. The tuned recruit length compositions are bi-modal for both sexes, indicating recruitment to the fishery comes both from growth of smaller individual within the LCMA and immigration from outside the LCMA (Figure 2). With these compositions, about 80% of male recruitment and 30% of female

recruitment is attributed to growth with the remainder of new individuals coming from immigration from outside the LCMA.

Fitting the simulation length comps by manually tuning these parameters resulted in reasonably good fits to the observed length compositions (Figures 3, 4, and 5). Some lack-of-fit is still evident within seasons but this lack-of-fit is generally contrary to the lack-of-fit observed in other seasons, making it difficult to further improve the fit with just the parameters of interest. Correlations between observed and predicted compositions were 0.981 for simple proportions and 0.97 for logit-transformed proportions, suggesting both high and low proportion values for observed length comps are well matched by the simulation and we deemed this adequate to a basis to examine alternative management options.

Decreasing either the minimum or maximum legal size is projected to decrease total weight of catch (Table 5). However, contrary to the previous analysis for the full stock or inshore LCMA's, changes to the maximum size have much larger impacts on landings than changes to the minimum size, particularly once the maximum size drops to between 140 and 150mm. Decreasing the maximum size from 171mm to 127mm is projected to decreases landings by about 30% while decreasing the minimum size from 90mm to 83mm is only projected to decrease landings by a couple of percent.

Decreasing the minimum legal size is projected to marginally increase the number of lobsters being landed but decreasing the maximum size marginally to moderately decreases the number of lobsters landed, producing neutral effects for many of the management options explored here (Table 6).

Decreasing maximum legal size from current regulations is projected to increase SSB, possibly significantly, but decreasing minimum sizes would decrease SSB (Table 7). The greatest observed increase would be from holding the minimum size at current values but maximally decreasing maximum sizes, essentially narrowing the length range where lobsters are legal, which is estimated to result in a 64% increase in spawning stock. As above, changes to maximum size have bigger effects on SSB than changes to minimum sizes.

Decreasing maximum sizes would result in a decrease in exploitation but decreasing minimum sizes would increase exploitation (Table 8), countering each other and paralleling patterns observed for SSB. Because the calculation of exploitation is based on numbers of individuals rather than mass, decreasing minimum sizes have larger effects on exploitation than observed above for landings or SSB. Again, changes in exploitation increase rapidly with decreasing maximum sizes once the alternate maximum gauge size reaches a size that includes a significant portion of the catch for the LCMA.

OCC Simulations

Due to time and data constraints, we did not attempt to tune a simulation model for OCC. Rather, we assume that population dynamics and fishing mortality rates in OCC are bounded by the conditions observed in the LCMA1 and LCMA3 fisheries. Thus, we ran simulations for OCC using the OCC legal size range with both the LCMA1 and LCMA3 parameterizations and present both sets of results with the understanding that results for OCC should fall between these extremes.

In general, outputs (catch weight, number, SSB and exploitation) show different responses for the LCMA1 than the LCMA3 parameterizations. LCMA1 parameterizations tend to produce simulations that are very sensitive to changes in minimum legal size but not maximum legal size, while simulations with LCMA3 parameterization only slightly sensitive to changes in minimum legal size but moderately to highly sensitive to changes in maximum legal size.

Total weight of landings is projected to be sensitive to changing minimum legal size with the LCMA1 parameterization but be insensitive with the LCMA3 parameterization (Table 9 A & B). With the LCMA1 parameterization, decreasing minimum size is projected to decrease landings by ~5% while increasing legal size to 88mm would increase landings by 8%. Conversely, landings weight is insensitive to changes in maximum legal size for the LCMA1 parameterization but sensitive to changes for the LCMA3 parameterization.

Total catch number simulations shows trend similar to catch weight with the LCMA1 parameterization being sensitive to changes in minimum size and the LCMA3 parameterization sensitive to changes in maximum size (Figure 10 A & B). The pattern otherwise holds that larger minimum legal sizes result in lower catch numbers.

For SSB, the LCMA1 parameterization is responsive to both changes in minimum and maximum legal size while the LCMA3 parameterization is more sensitive to changes in maximum size (Figure 11 A & B). For example, decreasing minimum legal size to 127mm would increase SSB by between 24% and 65% for the LCMA1 and LCMA3 parameterizations, respectively. The ranges of minimum size tested in simulations produce changes in SSB in the rage of -26% to +76% for the LCMA1 parameterization and -1% to +6.8% for the LCMA3 parameterization.

Decreasing minimum legal size produce increases moderate to small increases in exploitation (16% to 4% for LCMA1 and LCMA3 parameterizations, respectively, Figure 12 A & B). Either increasing minimum legal size or decreasing maximum legal size decrease serve to decrease exploitation with a maximum decrease of ~39% observed at the largest minimum and smallest maximum size and the LCMA3 parameterization.

Discussion

There is a stark difference in cumulative landings by size between LCMA1 and LCMA3. LCMA1 is clearly a recruitment-based fishery that would be highly sensitive to variations in recruitment. The LCMA3 fishery, in contrast, is fishing a broad range of lobster sizes, and therefore ages, and is thus somewhat buffered from interannual variation in recruitment dynamics.

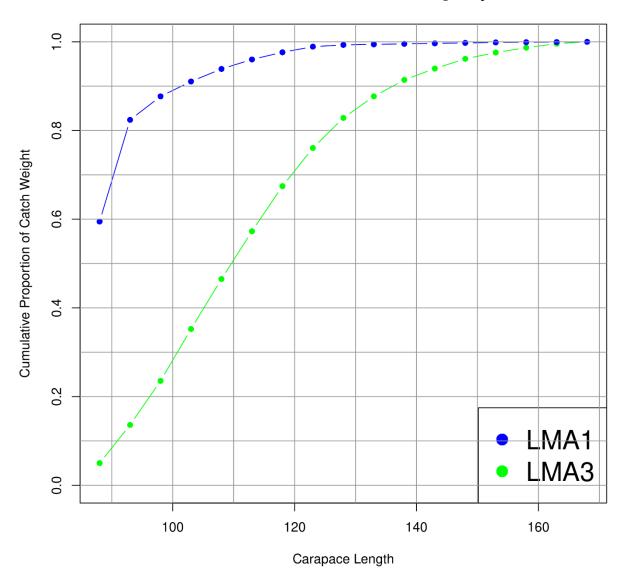
The LCMA1 fishery is highly sensitive to changes in minimum legal size because of high exploitation rates on newly-recruited lobsters. The range of minimum sizes tested in

simulations encompasses size range that represents the majority of landings for the inshore / nearshore fishery. Thus, changes to minimum size would dramatically change the length composition of the catch. Increases in the minimum size will have temporarily but significantly depress landing in the years immediately after are implemented but the benefits to SSB would be similarly immediate. Increasing the minimum legal size can add to the resilience of the fishery by marginally increasing the spread of effort across multiple year classes and significantly increasing SSB and egg production which may buffer the effects in any future change in productivity.

Generally, decreasing maximum gauge sizes have larger effects for LCMA3 both relative to decreasing minimum sizes in LCMA3 or for changing maximum sizes for the other LCMAs. This matches the conclusions based on the cumulative catch curve (Figure 1) that showed that the LCMA3 fishery lands a much broader size range of individuals than the inshore LCMAs, with the upper portion of length compositions overlapping proposed alternative maximum sizes.

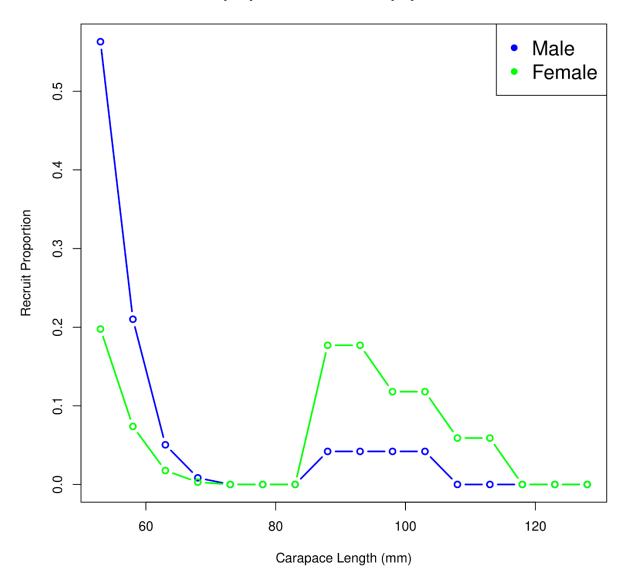
This analysis for LCMA3 matches previous analysis conducted for inshore LCMAs, finding that larger minimum legal sizes had positive effects across population parameters including higher catch weights, increased SSB and decreased exploitation. However, decreasing maximum legal sizes has mixed effects, decreasing immediate landings but increasing SSB, potentially by a larger margin. Because recruitment subsidies from increasing SSB are not included in this simulation, the net effect of these two opposing changes are uncertain. While decreasing maximum legal sizes would decrease immediate landings and make a larger portion of the population inaccessible to the fishery permanently (i.e. excluded lobsters won't grow into a legal size in the future), this increase in SSB may eventually produce a recruitment subsidy that could offset this loss of catch. The net effect would depend on multiple factors including the connectivity of the added SSB to larval settlement habitat and the migration patterns of these large females into adjacent habitats including inshore Gulf of Maine and international waters.

Finally, it is important to note the importance of large female lobsters that dominate the landings for much of LCMA3. This both highlights the partial dependence of this fishery on immigration from adjacent habitats and adds uncertainty to this analysis. The growth and molt cycling of such large females is poorly understood and are not particularly well informed in the current growth model. Thus, the tuned parameters may be biased by mis-specification of the growth model and results in this analysis may be sensitive to the growth model used in some cases. Interpretation of tuned parameters and confidence in the precise results of this analysis should be taken with some caution. However, the general patterns of changing catch, SSB and exploitation with changes in minimum and maximum legal sizes is consistent across this and previous analyses so may be treated with higher confidence.



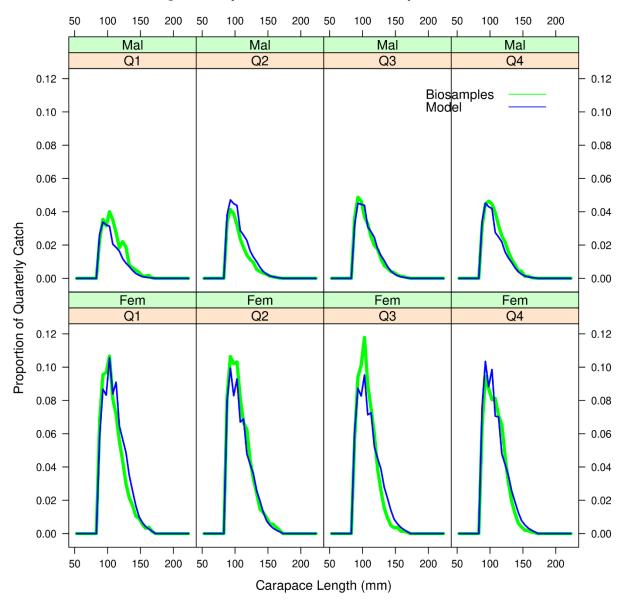
Cumulative Distribution of Catch Weight by Size

Figure 1. Cumulative proportion of catch weight by carapace length. To interpret, lobsters less than 90mm constitute approximately 8% of landings, while lobsters less than 130mm constitute approximately 85% of landings.



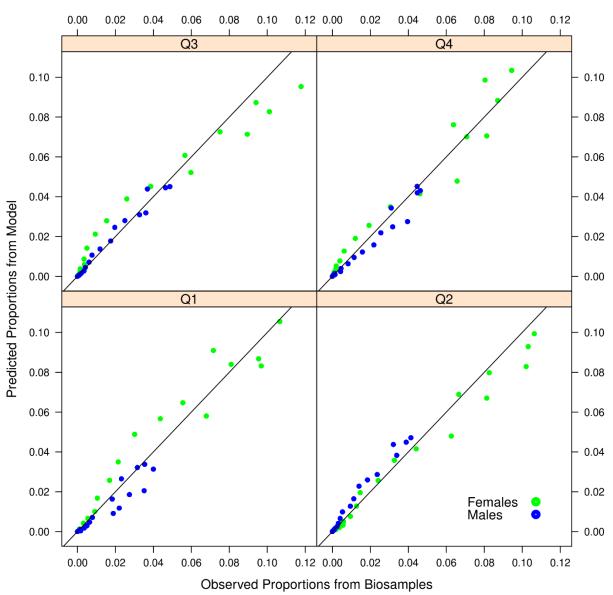
Recruit proportions for tuned population model

Figure 2. Tuned recruitment length compositions for the fitted model. The bi-modal length distribution suggests a combination of recruitment by growth (individuals <70mm) and migration (individuals >85 mm) with males primarily recruiting by growth and females primarily recruiting by migration as mature adults.



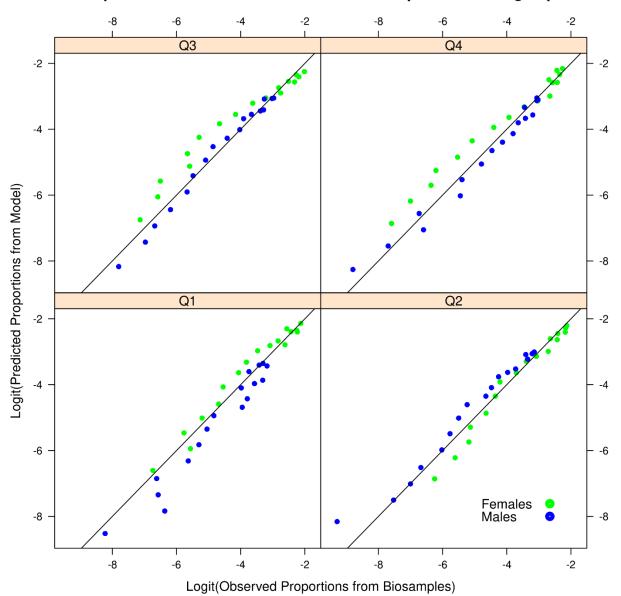
Catch Length Comps Observed in Biosamples and Predicted

Figure 3. LCMA 3 catch length compositions by sex and quarter based on biosampling and from the tuned population model.



Scatterplot of Observed vs Predicted Catch Proportions

Figure 4. Relationship between length composition proportions observed in biosamples and predicted in the tuned population model by quarter and sex. The diagonal 1:1 line shows an ideal fit between the data sets.



Scatterplot of Observed vs Predicted Catch Proportions in Logit space

Figure 5. Relationship between length composition proportions observed in biosamples and predicted in the tuned population model by quarter and sex. Data points are logit-transformed to emphasize fit to lengths that occur in low proportions. The diagonal 1:1 line shows an ideal fit between the data sets.

			Maximum Gauge Size						
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
0	83mm	0.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	
Size	3.31in /								
agr	84mm	3.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
Gaı	3.38in /								
Ę	86mm	5.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	
Minimum Gauge	3.47in /								
Mir	88mm	13.00%	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%	
	3.53in /								
	90mm	14.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	
	3.594in								
	/ 91mm	16.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	

Table 1. <u>LCMA1</u> projected relative changes to <u>Weight of Landings</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

Table 2. <u>LCMA1</u> projected relative changes to <u>Number of lobsters</u> <u>Landed</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

		Maximum Gauge Size						
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /	
		127mm	140mm	152mm	159mm	165mm	171mm	None
	3.25in /	0.00%	0.20%	0.200/	0.20%	0.200/	0.20%	0.20%
e	83mm	0.00%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
ge Size	3.31in / 84mm	-2.00%	-1.80%	-1.80%	-1.80%	-1.80%	-1.80%	-1.80%
Gauge	3.38in /							
В Ц	86mm	-3.60%	-3.30%	-3.30%	-3.30%	-3.30%	-3.30%	-3.30%
Minimum	3.47in /							
Ξ.	88mm	-8.50%	-8.10%	-8.00%	-8.00%	-8.00%	-8.00%	-8.00%
	3.53in /							
	90mm	-9.50%	-9.00%	-9.00%	-9.00%	-9.00%	-9.00%	-9.00%
	3.594in							
	/ 91mm	-11.30%	-10.80%	-10.70%	-10.70%	-10.70%	-10.70%	-10.70%

		Maximum Gauge Size							
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
a)	83mm	0.00%	-16.50%	-18.30%	-18.50%	-18.50%	-18.60%	-18.60%	
Size	3.31in /								
Be	84mm	19.00%	-1.40%	-3.60%	-3.80%	-3.90%	-3.90%	-3.90%	
Gau	3.38in /								
Ę	86mm	38.00%	13.90%	11.30%	11.00%	10.90%	10.90%	10.90%	
Minimum Gauge	3.47in /								
Ē	88mm	98.00%	61.00%	56.90%	56.60%	56.50%	56.40%	56.40%	
	3.53in /								
	90mm	117.00%	75.80%	71.30%	70.90%	70.70%	70.70%	70.70%	
	3.594in								
	/ 91mm	151.00%	101.70%	96.40%	95.90%	95.70%	95.70%	95.60%	

Table 3. <u>LCMA1</u> projected relative changes to <u>Spawning Stock Biomass</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

Table 4. <u>LCMA1</u> projected relative changes to <u>Exploitation</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

			Maximum Gauge Size						
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in / 83mm	0.00%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	
Size		0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	0.0070	
Jge Si	3.31in / 84mm	-8.50%	-7.70%	-7.60%	-7.60%	-7.60%	-7.60%	-7.60%	
ı Gauge	3.38in /								
En	86mm	-14.40%	-13.60%	-13.50%	-13.50%	-13.50%	-13.50%	-13.50%	
Minimum	3.47in / 88mm	-29.40%	-28.40%	-28.30%	-28.30%	-28.30%	-28.30%	-28.30%	
2	3.53in / 90mm	-32.10%	-31.00%	-30.90%	-30.90%	-30.90%	-30.90%	-30.90%	
	3.594in								
	/91mm	-36.50%	-35.40%	-35.30%	-35.20%	-35.20%	-35.20%	-35.20%	

				Maxi	mum Gaug	e Size		
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /	
		127mm	140mm	152mm	159mm	165mm	171mm	None
	3.25in /							
a)	83mm	-31.30%	-14.60%	-6.30%	-4.20%	-2.80%	-2.10%	-0.80%
Size	3.31in /							
Ige	84mm	-31.20%	-14.30%	-6.00%	-3.80%	-2.40%	-1.60%	-0.40%
Gau	3.38in /							
Ę	86mm	-31.20%	-14.00%	-5.60%	-3.40%	-2.00%	-1.20%	0.00%
Minimum Gauge	3.47in /							
Mir	88mm	-31.10%	-13.60%	-5.00%	-2.70%	-1.30%	-0.50%	0.80%
-	3.53in /							
	90mm	-31.40%	-13.40%	-4.60%	-2.30%	-0.90%	0.00%	1.30%
	3.594in							
	/ 91mm	-31.70%	-13.20%	-4.10%	-1.70%	-0.30%	0.60%	1.90%

Table 5. <u>LCMA3</u> projected relative changes to <u>Weight of Landings</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

Table 6. <u>LCMA3</u> projected relative changes to <u>Number of lobsters</u> <u>Landed</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

Maximum Gauge Size

	5in / 127mm	5.5in / 140mm	6in / 152mm	6.25in / 159mm	6.5in / 165mm	6.75in / 171mm	None
3.25in / 83mm	-11.10%	-0.80%	3.20%	4.00%	4.50%	4.70%	5.00%
3.31in / 84mm	-12.20%	-1.70%	2.30%	3.20%	3.70%	3.90%	4.20%
3.38in / 86mm	-13.20%	-2.60%	1.50%	2.30%	2.80%	3.10%	3.40%
3.47in / 88mm	-15.20%	-4.20%	-0.10%	0.80%	1.30%	1.50%	1.80%
3.53in / 90mm	-17.10%	-5.90%	-1.70%	-0.80%	-0.30%	0.00%	0.30%
3.594in / 91mm	-19.50%	-7.90%	-3.60%	-2.60%	-2.10%	-1.90%	-1.50%

Minimum Gauge Size

Table 7. LCMA3 projected relative changes to Spawning Stock Biomass resulting from alternative
minimum and maximum options, relative to the current regulations (yellow cell).

				Maxir	num Gaug	e Size		
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /	
		127mm	140mm	152mm	159mm	165mm	171mm	None
	3.25in /							
a)	83mm	56.00%	19.00%	3.00%	-1.50%	-3.80%	-5.20%	-6.90%
Size	3.31in /							
lge	84mm	57.00%	20.00%	3.00%	-0.80%	-3.10%	-4.50%	-6.20%
Gau	3.38in /							
Ę	86mm	59.00%	21.00%	4.00%	0.00%	-2.40%	-3.70%	-5.50%
Minimum Gauge	3.47in /							
Ξ	88mm	61.00%	23.00%	6.00%	1.50%	-0.90%	-2.30%	-4.10%
	3.53in /							
	90mm	64.00%	25.00%	8.00%	3.80%	1.40%	0.00%	-1.80%
	3.594in							
	/ 91mm	69.00%	29.00%	11.00%	6.70%	4.20%	2.80%	1.00%

Table 8. <u>LCMA3</u> projected relative changes to <u>Exploitation</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell).

		Maximum Gauge Size							
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
a)	83mm	-20.40%	-0.30%	8.40%	10.30%	11.40%	11.90%	12.50%	
Size	3.31in /								
Jge	84mm	-22.30%	-2.40%	6.30%	8.10%	9.20%	9.70%	10.30%	
Gaı	3.38in /								
En	86mm	-24.10%	-4.40%	4.10%	6.00%	7.00%	7.50%	8.10%	
Minimum Gauge	3.47in /								
Mir	88mm	-27.40%	-8.10%	0.30%	2.20%	3.10%	3.70%	4.30%	
	3.53in /								
	90mm	-30.60%	-11.60%	-3.30%	-1.50%	-0.50%	0.00%	0.60%	
	3.594in								
	/ 91mm	-34.20%	-15.60%	-7.50%	-5.70%	-4.80%	-4.20%	-3.70%	

Table 9. <u>OCC</u> projected relative changes to <u>Weight of Landings</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell), based on (A) LCMA1 or (B) LCMA3 paramerizations.

Α.		Maximum Gauge Size							
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
0	83mm	-5.60%	-5.00%	-4.90%	-4.90%	-4.90%	-4.90%	-4.90%	
Size	3.31in /								
ge	84mm	-2.70%	-2.00%	-1.90%	-1.90%	-1.90%	-1.90%	-1.90%	
Gau	3.38in /								
Ę	86mm	-0.90%	-0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	
Minimum Gauge	3.47in /	6 6 6 6 K		0.000/	0.000/	0.000/	0.000/		
Σ	88mm	6.60%	7.80%	8.00%	8.00%	8.00%	8.00%	8.00%	
	3.53in /								
	90mm	7.40%	8.80%	8.90%	8.90%	8.90%	8.90%	8.90%	
	3.594in								
	/91mm	9.30%	11.00%	11.20%	11.20%	11.20%	11.20%	11.20%	

Β.

					•			
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /	
		127mm	140mm	152mm	159mm	165mm	171mm	None
	3.25in /							
	83mm	-30.40%	-13.50%	-5.20%	-3.00%	-1.60%	-0.80%	0.00%
Size	3.31in /							
ag	84mm	-30.30%	-13.20%	-4.80%	-2.60%	-1.20%	-0.40%	1.00%
Gal	3.38in /							
Ę	86mm	-30.30%	-13.00%	-4.40%	-2.20%	-0.80%	0.00%	1.00%
Minimum Gauge	3.47in /							
Air	88mm	-30.30%	-12.50%	-3.80%	-1.50%	-0.10%	0.70%	2.00%
_	3.53in /							
	90mm	-30.60%	-12.40%	-3.40%	-1.10%	0.40%	1.20%	3.00%
	3.594in							
	/ 91mm	-30.90%	-12.10%	-2.90%	-0.50%	1.00%	1.90%	3.00%

Table 10. OCC projected relative changes to <u>Number of lobsters Landed</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell), based on (A) LCMA1 or (B) LCMA3 paramerizations.

Α.		Maximum Gauge Size							
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
	83mm	3.40%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	
Size	3.31in /								
ge	84mm	1.30%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	
Gau	3.38in /								
Ę	86mm	-0.30%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Minimum Gauge	3.47in /	E 400/	4.000/	4.000/	4.000/	4.000/	4.000/		
Σ	88mm	-5.40%	-4.90%	-4.90%	-4.90%	-4.90%	-4.90%	-4.90%	
	3.53in /								
	90mm	-6.40%	-5.90%	-5.90%	-5.90%	-5.90%	-5.90%	-5.90%	
	3.594in								
	/91mm	-8.30%	-7.70%	-7.70%	-7.70%	-7.70%	-7.70%	-7.70%	

Β.

		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /	
		127mm	140mm	152mm	159mm	165mm	171mm	None
	3.25in /							
a)	83mm	-13.80%	-3.70%	0.10%	0.90%	1.40%	1.60%	1.90%
Size	3.31in /							
lge	84mm	-14.80%	-4.60%	-0.70%	0.10%	0.60%	0.80%	1.10%
Gau	3.38in /							
Ę	86mm	-15.80%	-5.50%	-1.50%	-0.70%	-0.20%	0.00%	0.30%
Minimum Gauge	3.47in /							
Ξi	88mm	-17.70%	-7.10%	-3.10%	-2.20%	-1.70%	-1.50%	-1.20%
_	3.53in /							
	90mm	-19.60%	-8.70%	-4.60%	-3.70%	-3.20%	-3.00%	-2.70%
	3.594in							
	/ 91mm	-21.90%	-10.70%	-6.40%	-5.50%	-5.00%	-4.80%	-4.50%

Table 11. <u>OCC</u> projected relative changes to <u>Spawning Stock Biomass</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell), based on (A) LCMA1 or (B) LCMA3 paramerizations.

Α.		Maximum Gauge Size							
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
0	83mm	-9.80%	-24.70%	-26.40%	-26.50%	-26.60%	-26.60%	-26.60%	
Size	3.31in /								
ge	84mm	7.00%	-11.10%	-13.10%	-13.30%	-13.30%	-13.30%	-13.30%	
Gau	3.38in /								
Ę	86mm	24.30%	2.70%	0.30%	0.10%	0.00%	0.00%	0.00%	
Minimum Gauge	3.47in /								
Ξ	88mm	78.20%	45.10%	41.50%	41.20%	41.10%	41.00%	41.00%	
	3.53in /								
	90mm	95.50%	58.50%	54.40%	54.00%	53.90%	53.90%	53.90%	
	3.594in								
	/ 91mm	126.20%	81.80%	77.00%	76.60%	76.50%	76.40%	76.40%	

Β.

		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /	
		127mm	140mm	152mm	159mm	165mm	171mm	None
	3.25in /							
0	83mm	63.00%	24.00%	7.00%	2.00%	-0.10%	-1.50%	-3.30%
e Size	3.31in /							
1ge	84mm	64.00%	25.00%	7.00%	3.00%	0.60%	-0.70%	-2.60%
Gal	3.38in /							
Ę	86mm	65.00%	26.00%	8.00%	4.00%	1.40%	0.00%	<mark>-1.80%</mark>
Minimum Gauge	3.47in /							
Ξ	88mm	67.00%	27.00%	10.00%	5.00%	2.90%	1.50%	-0.30%
	3.53in /							
	90mm	71.00%	30.00%	12.00%	8.00%	5.30%	3.90%	2.00%
	3.594in							
	/ 91mm	75.00%	34.00%	15.00%	11.00%	8.30%	6.80%	4.90%

Table 12. <u>OCC</u> projected relative changes to <u>Exploitation</u> resulting from alternative minimum and maximum options, relative to the current regulations (yellow cell), based on (A) LCMA1 or (B) LCMA3 paramerizations.

Α.		Maximum Gauge Size							
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /		
		127mm	140mm	152mm	159mm	165mm	171mm	None	
	3.25in /								
	83mm	15.60%	16.50%	16.50%	16.50%	16.50%	16.50%	16.50%	
Size	3.31in /								
lge Be	84mm	5.80%	6.70%	6.80%	6.80%	6.80%	6.80%	6.80%	
Gau	3.38in /								
Ę	86mm	-1.10%	-0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	
Minimum Gauge	3.47in / 88mm	-18.40%	-17.30%	-17.10%	-17.10%	-17.10%	-17.10%	-17.10%	
Σ	0011111	-10.40%	-17.50%	-17.10%	-17.10%	-17.10%	-17.10%	-17.10%	
	3.53in /								
	90mm	-21.50%	-20.20%	-20.10%	-20.10%	-20.10%	-20.10%	-20.10%	
	3.594in								
	/ 91mm	-26.70%	-25.30%	-25.20%	-25.20%	-25.20%	-25.20%	-25.20%	

Β.

		C C									
		5in /	5.5in /	6in /	6.25in /	6.5in /	6.75in /				
		127mm	140mm	152mm	159mm	165mm	171mm	None			
	3.25in /										
Minimum Gauge Size	83mm	-26.00%	-7.30%	0.80%	2.60%	3.60%	4.10%	4.60%			
Size	3.31in /										
Jge	84mm	-27.70%	-9.20%	-1.20%	0.60%	1.50%	2.00%	2.60%			
Gau	3.38in /										
Minimum	86mm	-29.40%	-11.10%	-3.20%	-1.40%	-0.50%	0.00%	0.60%			
	3.47in /										
	88mm	-32.50%	-14.50%	-6.70%	-5.00%	-4.10%	-3.60%	-3.00%			
	3.53in /										
	90mm	-35.40%	-17.70%	-10.00%	-8.40%	-7.50%	-7.00%	-6.50%			
	3.594in										
	/ 91mm	-38.80%	-21.50%	-13.90%	-12.30%	-11.40%	-10.90%	-10.40%			

Appendix C. Trigger Mechanism Analysis and Recommendation

Recruit (71-80 mm carapace length) indices are used as model-free indicators of recruitment to the lobster fishery in the following year. During the 2020 stock assessment, recruit indicators were found to be correlated with the stock assessment model estimates of reference abundance (78+ mm carapace length), providing a reliable means to track abundance changes and potential need for management response more frequently than through intermittent stock assessments. There are eight GOM/GBK stock recruit indicators updated for each assessment: spring and fall indices for each of the ME/NH, MA DMF, NEFSC GOM, and NEFSC GBK bottom trawl surveys. The NEFSC indicators in the GOM and GBK regions are considered to be indicators of offshore recruitment which differs from the GOM/GBK stock-wide recruitment dynamics. Therefore, the American Lobster Technical Committee (TC) recommended using only the inshore surveys (ME/NH and MA DMF) where the bulk of the population and fishery occur, which are assumed to be more representative of stock-wide recruitment. These trawl surveys employ similar methodologies and, along with selectivity and swept area calibration factors, can be combined into two indices, a spring index and a fall index. Additionally, the TC recommends using the standardized index from the Ventless Trap Survey as an indicator of recruitment during the summer.

To calculate a trigger index, each of the three individual indices were scaled to their 2017 reference levels so they are on the same scale. The one year lag expected between recruit indices and reference abundance due to growth results in 2017 recruit indices mapping to the terminal year reference abundance used in the 2020 stock assessment status determination (2018). The TC recommended linking the trigger index to the reference abundance in this way so the trigger index is an indication of proportional changes to the reference abundance since the 2020 stock assessment. Proportional changes in the trigger index are compared directly to proportional changes between the terminal year reference abundance and abundance reference points established in the assessment to provide an early indication of reference abundance falling below the reference points. Scaled indices were then averaged across surveys to generate a single trigger index. The final trigger index value represents proportional change from 2017 recruitment (and, therefore, expected proportional change from the reference abundance one year later in 2018 - the terminal year of the stock assessment). A value of one indicates no change, a value greater than one indicates an increase (e.g., 1.2 indicates a 20% increase), and a value less than one indicates a decrease (e.g., 0.8 indicates a 20% decrease).

During the 2020 stock assessment, the peer review panel supported using a smoothing algorithm, such as the running average used in past assessments, to determine stock status, but also recommended exploring alternatives (e.g., running median) to evaluate the robustness of status determinations. To evaluate performance of different methods for a trigger mechanism, akin to evaluating stock status in a stock assessment, a simulation analysis was conducted using the trigger index annual point value, three-year running average, and three-year running median to identify need for management action. For each method, all three individual indices were scaled to a 2017 reference level calculated with the same method used to calculate the

index. That is, the 2017 reference level was the 2017 point value for the annual index trigger method, the 2015-2017 average for the three-year running average trigger method, and the 2015-2017 running median for the three-year running median trigger method. The scaled individual and combined indices are compared to various trigger points related to assessment abundance reference points in Figure 1.

The TC treated 0.68 (i.e., a 32% decline) as the trigger for action in the simulation analysis. This decline represents the proportional change between the terminal year stock assessment reference abundance level and the boundary between the high and moderate abundance regimes. Each individual index was projected from 2018 to 2025 following a steady decline that reflected a 32% decline from the observed 2017 index value in 2021. This projected trend is hypothetical to evaluate the performance of the three calculation methods being considered and does not necessarily reflect the true status or projection of the population. It was unclear what impacts the method used to calculate the starting point of the projected trend would have on performance of each trigger mechanism, so declines projected from the (1) 2017 point value, (2) 2015-2017 running average, and (3) 2015-2017 running median were evaluated in three separate scenarios. Indices were then sampled from these simulated trends with CVs equal to the average CV over the respective index's time series, assuming a lognormal error structure. These simulations only consider observation error and do not account for process error. Indices were scaled to their reference level as described above, averaged across surveys, and the combined trigger index was evaluated for whether or not it would trigger action (≤ 0.68) in each year of the projection period. This was repeated 1,000 times for each scenario and action determinations were tallied by year for each of the methods.

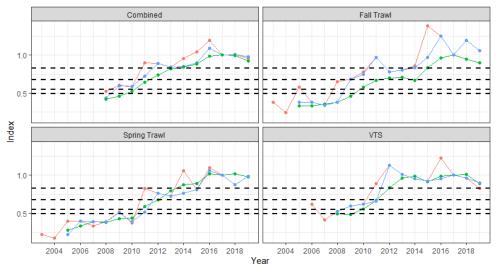
Results show similar patterns between the scenarios using a simulated decline from the 2017 point value and from the 2015-2017 average (Table 1; Figures 2-3). The 2015-2017 running median was equal to the 2017 point value for all indices, so the results with a simulated decline from this value were identical to the 2017 point value scenario (Table 2; Figure 4). Incorrect action is triggered very infrequently (< 3% of the time) by the annual and running median methods in the first two years of the projection period and never by the running average method. On average, the annual and running median methods incorrectly triggered action about 9% of the time and about 15 times more frequently than the running average method the year before the decline reached the threshold (2020), but also correctly triggered action ≈38% of the time and roughly twice as frequently as the running average method in the year when the threshold was met (2021). The running average method then tended to perform as well as or better than the other methods from 2022-2025, albeit generally at smaller margins of difference, as all methods tended to perform relatively well in these later years when the decline is exacerbated. The delayed response of the running average method can be seen in Figures 5-7, where the median trigger index value across simulations tends to be slightly higher than the annual and running median methods. The variance in index values, however, is lower for the running average method resulting in more consistency across simulations in terms of guidance for management action, whereas the other methods result in mixed guidance for some of the more extreme simulations in more years than the running average method.

Based on these results, the trigger mechanisms using the annual point value and the running median may be considered precautionary methods that perform better for an immediate trigger, on average, but with more variable guidance than the running average method. The running average method may provide a less responsive trigger mechanism that is less likely to incorrectly trigger premature action, and performs well and more consistently after the initial risk of not triggering action when first needed.

<u>The TC recommended the running average method for calculating the trigger index.</u> The individual surveys display interannual variation that might be related to environmental impacts on catchability (for example), an issue that was identified in the stock assessment and is expected to continue to impact these indices index data sets into the future. This simulation analysis suggests the running average method is more robust to interannual variation than the other methods and therefore can be interpreted with higher confidence.

Simulated Decline Starting Point	Index Calculation Method	2018	2019	2020	2021	2022	2023	2024	2025
	Annual	0%	2%	12%	50%	85%	97%	100%	100%
2017 Point Value	Three-Year Running Average	0%	0%	1%	27%	86%	100%	100%	100%
	Three-Year Running Median	0%	2%	12%	44%	84%	98%	100%	100%
	Annual	0%	0%	3%	21%	59%	89%	99%	100%
2015-2017 Average	Three-Year Running Average	0%	0%	0%	3%	46%	95%	100%	100%
	Three-Year Running Median	0%	0%	3%	19%	60%	90%	99%	100%
	Annual	0%	2%	12%	50%	85%	97%	100%	100%
2015-2017 Running Median	Three-Year Running Average	0%	0%	1%	27%	86%	100%	100%	100%
	Three-Year Running Median	0%	2%	12%	44%	84%	98%	100%	100%
	Annual	0%	2%	9%	40%	76%	94%	100%	100%
Average	Three-Year Running Average	0%	0%	1%	19%	73%	98%	100%	100%
	Three-Year Running Median	0%	1%	9%	36%	76%	95%	100%	100%

Table 1. Percentage of 1,000 simulated indices that triggered action for three simulated decline starting point scenarios, and the averages of these scenarios. The simulated stock was projected to decline 32% in 2021.



Method

Annual

Three-Year Running Average

Three-Year Running Median

Figure 1. Scaled individual and combined indices using three calculation methods compared to four trigger levels (0.83 – Fishery/Industry Target, 0.68 – Moderate/High Abundance Regime Shift Level, 0.55 – Abundance Limit, 0.49 – Abundance Threshold) identified from potential reference abundance declines (dashed lines).

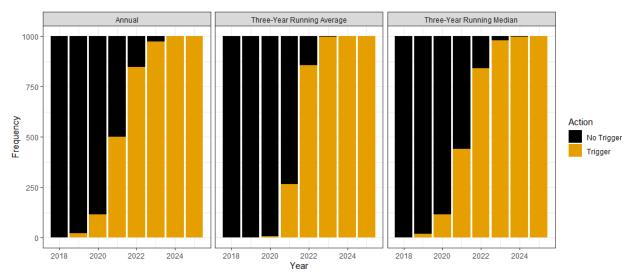


Figure 2. Annual action determinations by method from 1,000 simulated indices with the simulated population declining from the 2017 point value. The simulated stock was projected to decline 32% in 2021.

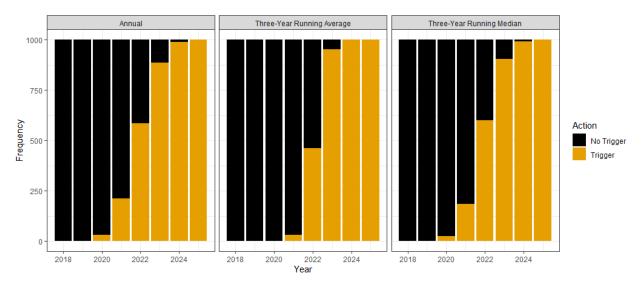


Figure 3. Annual action determinations by method from 1,000 simulated indices with the simulated population declining from the 2015-2017 average. The simulated stock was projected to decline 32% in 2021.

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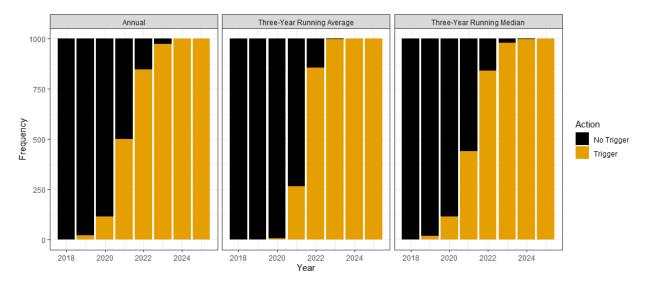


Figure 4. Annual action determinations by method from 1,000 simulated indices with the simulated population declining from the 2015-2017 median. The simulated stock was projected to decline 32% in 2021.

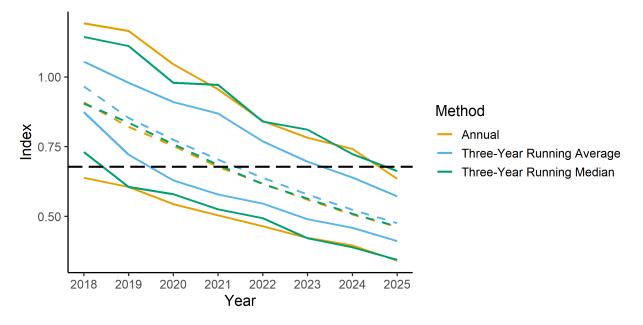


Figure 5. Distribution of index values by method from 1,000 simulations with the simulated population declining from the 2017 point value. The dashed colored lines are the median index values across simulations, the solid color lines are the minimum and maximum index values across simulations, and the dashed black line is the trigger level. The simulated stock was projected to decline 32% in 2021.

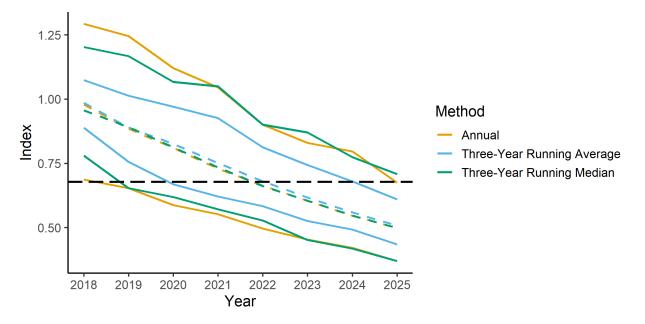


Figure 6. Distribution of index values by method from 1,000 simulations with the simulated population declining from the 2015-2017 running average. The dashed colored lines are the median index values across simulations, the solid color lines are the minimum and maximum index values across simulations, and the dashed black line is the trigger level. The simulated stock was projected to decline 32% in 2021.

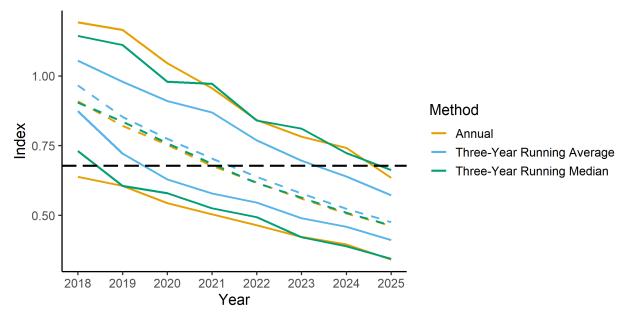


Figure 7. Distribution of index values by method from 1,000 simulations with the simulated population declining from the 2015-2017 running median. The dashed colored lines are the median index values across simulations, the solid color lines are the minimum and maximum index values across simulations, and the dashed black line is the trigger level. The simulated stock was projected to decline 32% in 2021.



Atlantic States Marine Fisheries Commission

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MEMORANDUM

- TO: American Lobster Management Board
- FROM: Caitlin Starks, Senior FMP Coordinator

DATE: April 14, 2023

SUBJECT: Public Comment on Draft Addendum XXVII to Amendment 3 to the American Lobster Fishery Management Plan

The following pages represent a draft summary of all public comments received by ASMFC on American Lobster Draft Addendum XXVII as of 11:59 PM (EST) on April 8, 2023 (closing deadline).

Comment totals for the Draft Addenda are provided in the table below, followed by summaries of the state public hearings, and written comments sent by organizations and individuals. A total of 68 written comments were received. These included 6 letters from organizations, and the remainder from individual industry stakeholders and concerned citizens. Eight public hearings were held; four were virtual and four were in-person. The total public attendance across the eight hearings was 214, though some individuals attended multiple public hearings. A total of 159 public comments were provided during the public hearings.

The following tables are provided to give the Board an overview of the support for each of the management options contained in Draft Addendum XXVII. Comment totals for comments provided during public hearings are organized by the hearing at which they were provided; some individuals attended hearings outside their home state. It should also be noted that some individuals provided comments at a public hearing and also submitted written comments, and these are counted separately in the tables below. Additional comments that did not indicate support for a particular option are included in the public hearing summaries and written comments. Prevailing themes from the comments are highlighted below, including general considerations and rationales for support or opposition.

Total Comments Received		
Total Form Letters	0	
Organization Letters	6	
Individual Comments	62	
Total Written Comments	68	

Table 1. Total Written Comments Submitted to ASMFC

Public Hearings	# Attendees	# Comments
ME 1	13	2
ME 2	41	11
ME 3	29	19
NH	16	9
MA 1	70	25
MA 2	35	26
RI	6	0
NY	4	0
Total	214	159

Table 2. Public Hearing Attendance and Comments

Table 3. Total Comments in Support of Each Option

	Written	Public Hearings					
Management Options	Comments	ME	NH	MA	RI	NY	Total
Issue 1, Option A (Status quo)	35	3	0	35	0	0	73
Issue 1, Option B	13	0	1	2	0	0	16
Sub-option B1	3	0	0	0	0	0	3
Sub-option B2	9	0	0	0	0	0	9
Sub-option B3	10	0	0	2	0	0	12
Sub-option B4	5	0	1	0	0	0	6
Issue 2, Option A (Status quo)	40	20	8	38	0	0	106
Issue 2, Option B	5	1	0	0	0	0	6
Trigger Option 1	2	0	0	0	0	0	2
Trigger Option	0	1	0	0	0	0	1
Measures Option 1	0	0	0	0	0	0	0
Measures Option 2	2	0	0	0	0	0	2
Issue 2, Option C	4	3	0	0	0	0	7

Prevailing themes from the public comments on Addendum XXVII are summarized below.

General Considerations

- Regardless of support or opposition, a significant number of individuals expressed concerns about market impacts that would result from the proposed increase to the minimum gauge size in the US, while Canada is allowed to continue importing smaller lobster. The concern is that the US would lose the market share for chick lobsters to Canada, creating an unfair disadvantage to the US fishery. Many comments stated opposition to allowing imports of undersized lobster from Canada if the minimum gauge increase goes into effect in the US.
 - Concern that the addendum does not contain any analysis of the market impacts of a gauge increase, particularly the disparity that will be created between the minimum size in Canada versus the minimum gauge in LCMA 1.

- Across the hearings and comments, many expressed support for standardization of the v-notch definition and requirement, which have proven effective to protect breeding females. However, a significant number of comments expressed that a zero-tolerance definition is preferred to the proposed definition.
 - Many comments also thought v-notching should occur in all the LCMAs
 - A few comments noted that they could support the proposed increase to the LCMA minimum gauge size <u>if</u> a zero-tolerance definition were required for all areas
- Some comments did not identify a preferred option or preferred status quo for Issue 2 because they could have supported some of the proposed changes, but not all of them. For example, some supported increasing the minimum gauge size in LCMA 1 but not decreasing the maximum gauge size in LCMA 3 and OCC. The rationale for this was generally related to the greater projected stock benefit from the LCMA 1 minimum size. Comments that supported the maximum size decrease, but not the minimum size increase, generally favored the protection of larger breeding lobster because they have more eggs that are of better quality.
- There are concerns that the proposed changes are ill-timed and will hinder the lobster industry's ability to remain successful and economically viable due to compounded challenges to the fishery
 - The industry is facing extreme regulatory uncertainty due to future changes in regulations related to whale conservation efforts
 - Lobster prices, bait shortages, and fuel costs are affecting the fishery and should be accounted for
 - Mackerel regulations hinder ability to bait traps effectively
 - Fuel prices have risen
 - Concern that the proposed changes could result in a permanent loss of yield to the fishery
- Many individuals spoke to the fact that the OCC is a unique management area that needs more specific management and data
 - The proposed changes would not have a significant impact on the stock due to the relatively small contribution to overall effort and catch, but they would significantly harm the OCC industry
 - Because the OCC fishery has developed a niche market and relies on large hard-shelled lobster, the proposed maximum size decrease would cause a significant and direct financial loss to fishermen in the OCC
 - The current OCC management plan is tailored to meet economic needs and conservation interests
 - Changes would have a disproportionately negative impact on fishermen in the OCC because the cost of living in the area is so high compared to other areas
 - Many requested that more data be gathered from the OCC area before changes are made
- If gauge changes occur, some would prefer gradual changes but others would prefer a single change to the measures. Ample notice is needed (12 months) for manufacturers to supply new gauges.
- The trigger should be based on a longer moving average than three years, and/or should incorporate landings data
- Many expressed concerns that the indices used in the Addendum are not accurately representing the stock and the fishery due to sampling locations
 - o Lack of targeted juvenile sampling in the Outer Cape area

- Climate affecting the movement of lobster to deeper water and habitat availability within the range
- Concern over increased juvenile lobster consumption by increased groundfish and black sea bass populations
- Measures should apply to all LCMA 3 permit holders, regardless of stock fished or home port state
- More time should be allowed to further observe stock trends before any measures are implemented
- A few comments mentioned that offshore wind development will further hinder lobster industry through additional future regulatory changes
- A number of comments proposed other types measures to improve protection of the stock
 - A tiered licensing system with more traps for people who have been fishing longer, equal trap limits by zone, and permit buybacks
 - A 7" trap entrance ring size requirements as opposed to maximum gauge size changes in the offshore fishery
 - Consider restricting harvest of lobster from 5 to 5 ½" inches to allow more lobsters to reach larger sizes in Area 3 and OCC
 - The Commission could consider an increase in the vent size, rather than a gauge increase, to minimize potential market impacts and equity issues
- If gauge changes are implemented, there should be a sunset clause, or the ability to revert to previous measures if the trigger index increases

Rationales for Issue 1 Option A. Status Quo

- Concerns that changing measures will hurt the lobster industry and lobster population
 - For example, increased restrictions on commercial harvest
 - Financial strain caused by requiring new gear
- Belief that the current measures are working and do not need to be changed
- More research is needed to justify this proposed change
- Belief that standardization is not needed because it will not benefit the stock, only law enforcement

Rationales for Option B. Standardized measures to be implemented upon final approval of addendum

- Standardizing and increasing the strictness of v-notch requirements across all LCMAs will help the stock across the entire GOM
 - Support for mandatory v-notching and a zero-tolerance v-notching definition across all management areas
 - Belief that mandatory v-notching with a zero-tolerance definition has contributed significantly to the increase in abundance of the lobster stock
 - V-notching female lobsters and protecting oversize lobsters are core conservation values for lobstermen in LCMA 1
- Support for sub-option B3 (standard v-notch definition):
 - It is a problem that lobsters that have to be thrown back in one area can just be harvested in another
- Support for sub-option B4 (limiting issuance of trap tags to equal allocation):
 - States should not issue surplus trap tags unless trap loss is documented. This is very important to reducing lost and derelict gear, which is causing environmental problems.

If harvesters have to report lost traps to get a new tag, it is more likely that gear can be removed.

- A small initial replacement allowance, that is less than the current 10%, would likely be easier to administer for states that do not already hold back replacement tags.
- If approved, this measure would need to be enacted for all of LCMA3, which would require revision to NH, MA, RI, and NMFS's trap tag distribution procedures.
- There is some concern that v-notching is an unenforceable mandate, based on level of at sea participation

Rationales for Issue 2 Option A. Status Quo

- Market concerns regarding the proposed increase to the minimum gauge size, which would give the market share of smaller lobsters to Canada.
 - Concern that the addendum does not contain any analysis of the market impacts of a gauge increase, particularly the disparity that will be created between the minimum size in Canada versus the minimum gauge in LMA 1.
 - o Unfair disadvantage to American harvesters and advantage for Canadian product
 - Opposition to allowing undersized lobster imported from Canada if minimum gauge change goes into effect in US
 - Opposition to any change to the LCMA 1 minimum gauge until a market study has been conducted to better understand the trade dynamics between the U.S. and Canada, impacts on demand, market segments, and boat price given that comparable gauge measures will not be adopted in Canada
- Massachusetts' commercial lobster fishery effort continues to decline through the loss of permits and the trap transfer tax, so pressure on the fishery is already being reduced
- The Outer Cape Lobstermen's Association supports status quo because the proposed changes would disproportionately harm the OCC fishermen due to the area's unique catch demographics, niche market, and high costs of living.
- Belief that the current measures are working and do not need to be changed
- Changing the measures will have a short-term negative impact on catch numbers but a long-term positive impact on catch weight
- A number of people believe current downward trends in juvenile indices are part of the lobster populations natural cycle, and are not grounds for changing the regulations already in place
- A number of comments stated that the lobster stock is in good condition and action is not yet needed or premature.
 - Some recognized that increasing the LCMA 1 minimum gauge size could help to expand overall lobster abundance, but it is not worth an overall change to the current fishery
- The reference timeframe for the trigger mechanism is too narrow

Rationales for Issue 2 Option B. Gauge and vent size changes triggered by a defined change in trigger index

- If the trigger mechanism is used, there was support for a change to minimum gauge size but would prefer a single change rather than multiple changes
- Support for implementing the minimum gauge size by 1/16" per year
- Support for measure increase in LCMA 1 and the decrease in LCMA 3
 - The proposed changes will increase the overall health of the stock

- Proposed changes will increase overall poundage by increasing the average weight per lobster harvested
- Proposed changes will bring a higher quality product to market, fetch a higher price, and provide more value to the marketplace
- The Atlantic Offshore Lobstermen's Association would support measures appropriate to the magnitude of documented recruitment declines, but opposes the proposed LCMA3 maximum gauge change because the conditions of the offshore stock and fishery do not warrant a permanent loss of landings

Rationales for Issue 2 Option C. Scheduled changes to gauge and escape vent sizes

- Increasing the measure as soon as possible will be better for the stock
- A gauge increase is essential for the fishery to remain viable in the years ahead
- The last gauge increase benefitted the stock, and we should act now while there is still time to reverse the trend

Lobster Addendum XXVII Public Hearing Summary

Freeport, Maine March 7, 2023 13 Public Participants

Staff and Commissioners in Attendance: Caitlin Starks (ASMFC), Megan Ware (ME DMR), Kathleen Reardon (ME DMR), Blaise Jenner (ME DMR), Stephen Train (ME)

Public: Daniel Sawyer, Justin Papkee, Matt Gilley, Ray Waite, Allison Hepler, Nicole Ogrysko, Marianne LaCroix, Kara Morrison, Jeremy Willey, Donald Ulrickson, Hugh Bowen, Lewis Cameron, John Hathaway

HEARING OVERVIEW

- It was suggested that there should be studies on the economic impacts of the proposed changes.
- Several attendees agreed that there should be discussions with Canada to better align the minimum sizes for both countries, because if we increase the minimum gauge size Canada will still be able to harvest smaller lobsters.
- Attendees commented that they are seeing mature lobsters seems at smaller sizes now than they did in the past.
- One person asked if the effects of dumping excess bait from traps into the water in previous years has been considered. This practice has changed in recent years due to decreased bait availability and increased prices, so there is much less bait being added to the habitat as an additional food source.
- Several attendees suggested that the landings time series should be incorporated into the trigger mechanism, along with the survey time series.
- One attendee commented on a proposed management plan for lowering risks to right whales which would lower trap limits and create an adjustable trap limit depending on the annual pounds harvested per trap.

PUBLIC COMMENT SUMMARY

Lewis Cameron

- Supports status quo measures for Maine. Other states should decrease their maximum gauge size to the size in LCMA 1.
- Sees this action as Maine once again footing the bill for the lobster stock. Canada is capitalizing on our proactive management measures.
- Believes the data is flawed and does not include how cod are affecting the recruitment of lobster, and how throwing bait overboard affects lobster.

Jeremy Willey

- Does not prefer to change the measures, but of the two approaches he supports the trigger mechanism approach over scheduled changes to measures.
- Should be additional data sets considered as part of this action, including climate data, data on the bait amount and type thrown overboard, and landings incorporated.

American Lobster Addendum XXVII Public Hearings - Sign in Sheet

Atlantic States Marine Fisheries Commission

Freeport, Maine March 7, 2023

-- PLEASE PRINT --

Organization	City, State	Email
C. H. Sawyert Son LLC	Warren, ME	danwoodsawyer@gnail.com
<u>ASMFC</u>	Lung Ir M.P.	, ,
lobster	Long Island	PAPHEEJE GMAIL-COM
-lebs+Pr	Happswell ME	_ Maille-19741(A) GIME 1, COM
DMR	Forsham ME	Slaist. Jenner@ maine.gas
(DBG/erina	Yarmouth Me.	vay.f. waite eqmail-4
state rep.	Woolud	allison heder a ligidarius man, jo
Maine Public	Portland	nogrysko & maine public. org
Munc	Portland	ulucrois Clubster frommand ca
		KMOVNJONC "
LOPSTER (MFT)	OWLS HEAD ME	jlwilley 923/2 gmail.com
n Labster	Freeport	
lobsternan	Freport	boy enh 1974@hotmail.com
DMR	Boothby	
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Draft Addendum XXVII Public Hearing Summary

March 8, 2023 Maine (via webinar) 41 Public Attendees

Staff and Commissioners in Attendance: Megan Ware (ME DMR), Lorraine Morris (ME DMR), Kathleen Reardon (ME DMR), Pat Keliher (ME DMR), Tracy Bauer (ASMFC)

HEARING OVERVIEW

- There were several suggestions given by multiple stakeholders regarding the management options in Draft Addendum XXVII:
 - Would prefer to see a maximum gauge size decrease in LMA1 as opposed to a minimum gauge size increase.
 - The trigger index should be based on a longer average than the three highest years in the surveys (suggested using 10-year average)
- Several stakeholders opposed a gauge size change. Reasons provided included: not seeing a decrease in eggers or juvenile lobsters, not enough data collected from offshore waters, the timing is bad given the other pressures on the industry (whales, offshore wind).
- Commenters expressed strong concerns about continuing to allow 3 ¼" lobsters caught in Canada to be shipped and transported into Maine. They commented that Canada will be catching the lobsters Maine is throwing back and then selling them in Maine, negatively impacting local markets.
- Many commenters pointed to the impact of predation (cod, striped bass, black sea bass) as a reason why the young-of-year surveys have declined and wanted greater research on the impact of predation before action is taken.
- Several comments expressed concern about offshore wind and the negative impact that this will have on the lobster resource and Gulf of Maine habitat.

PUBLIC COMMENT SUMMARY

Jesse Roche - A sternman in Boothbay but grew up in Long Island Sound. Black sea bass (BSB) has been steadily moving north and we're seeing all sorts of baby lobsters getting eaten by BSB. This predation decimated Long Island Sound. ASMFC should be looking at the stomach contents a little closer to inform their decision in Gulf of Maine. Maine is starting to see BSB in traps.

Jason Joyce – I would like to see the trigger mechanism, if implemented, to be the highest option (45%) and would recommend that the trigger index be modified so that it is based on a 10-year average and that would slide along instead of being based off of the 3 highest years in the survey (2016-2018). I do support the decrease in the max gauge size in LMA3 and I would rather see a decrease in the max gauge size in LMA3 and I would rather see a decrease in the max gauge size in LMA1 as an option instead of an increase in the minimum gauge size. This should provide benefit since large lobsters are bigger reproducers. I would also like to see ASMFC come out as opposed to offshore wind since it will destroy habitat, negatively impact larval lobsters and plankton, and create a web of cables which are electrified and will radiate heat into the Gulf of Maine. This will all negatively impact the lobster resource. Finally, I am completely opposed to allowing Canadian lobsters at 3 ¼" to continue to come into the states (by maintaining the 3 ¼" min gauge size in the federal plan). A gauge size change will cause our landings to come down and if the price doesn't reflect our sacrifice then that's not good. I'm opposed to allowing Canadian lobsters to fill the gap.

Chris Clark – I also support using a 10-year average for the trigger index instead of the 3-year average. I also think the federal trawl surveys should be included in the trigger index in addition to the state surveys. The amount of lobsters caught in federal waters has gone up so data from that area should be included. ASMFC should definitely address offshore wind and oppose it because it will damage the habitat. I would rather see a decrease in the maximum gauge size in LMA1 because it will have less impact on fishermen. I don't think there is a problem with the stock because I've seen a lot of juvenile lobsters. Regarding Canada, I don't think it is ok if they can import 3 ¼" lobsters; that will impact our bottom line if that were to happen. I'm also hearing friends see BSB in their traps and am concerned that the predatory fish aren't being looked at. We've been seeing more cod too. I also think the ventless trap survey should go deeper than 30 fathom.

Michael Dawson – I fish out of New Harbor. I am totally opposed to this change. We have seen lobsters move offshore. There is not enough science in deep waters to make this decision. What we see as fishermen should show ASMFC that there are plenty of lobsters offshore since we are fishing there yearround. This action is unnecessary, especially with all of the other issues going on such as whales, offshore wind, high costs of everything, low prices of lobsters. If we allow Canadian lobsters to keep coming in at 3 ¼" there will be no financial benefit to Maine fishermen and it will be a double whammy. We would take a big hit if Canadians can still import the smaller size.

Kate – I've heard that there is a seven-year slump in the industry and that seems to follow the data shown. The climate is always changing and this follows the seven-year slump. We also need to look at the migratory pattern of lobsters and the predators - there are so many cod and BSB now which need to be taken into consideration. In regards to MA and NH, all the states need to get on the same page for measures. We also need a baseline for a trigger index that is more than the three years of 2016-2018.

Sam Joy – I think we should lower the max gauge size instead of increasing the minimum gauge size. I think this addendum is potentially helpful but it is another stress on the industry right now given whales and wind. It is poor timing to do this. The data isn't all there to support this and we should focus on better funding for the ventless trap surveys to do more surveys offshore.

Jack Merrill – The fishing industry has been focusing on a lot of other topics recently and this has been in the background. I'm not necessarily opposed but there are a lot of questions that need to be answered first. There needs to be an extensive marketing study on the importance of chick lobsters to the market. For example, will a larger lobster drive down the price per pound? Are customers willing to accept a higher price for a lobster roll or a lobster on a plate since it will be bigger? Regarding lobsters coming across the border, we would want to guarantee that we wouldn't allow smaller lobsters to come across the border to take up that marketplace. Another question is a gauge size increase is expected to raise the weight landed but what percentage of lobsters will egg out in a smaller gauge size window? Will this result in no increase in the weight landed? We do not see any lack of v-notch lobsters on the bottom and I'm seeing a year class of lobsters that is 5-6 years away from the fishery which is big. And we have already seen an increase in smaller lobsters carrying eggs due to climate change. A gauge increase is not going to address global warming. Last summer we heard complaints from dealers that they couldn't handle the volume of lobsters. If this action is going to increase the volume of lobsters that might not be a positive for the fishermen. We had prices that were really scary last year. Finally regarding predation, changing the legal size could increase egg production but it doesn't guarantee the smaller lobsters will make it to legal size given higher predation.

Virginia Olsen – I don't agree with a change in our gauge until we investigate predation more. And I don't agree with allowing Canadians to bring the smaller catch into the US.

Tad Miller – I'm not necessarily against the gauge increase. But I agree with the comment about more data and the Canadians lobsters is an area of concern. Opening the door for Canada would affect our local markets. The biggest thing that concerns me is that there is parity between the LMAs. Maine is being asked to make a big sacrifice but other LMAs are going to see the benefit, especially LMA3. The sacrifice of each LMA needs to be more equitable. I think LMA3 needs to come down further on the maximum gauge size. They are a smaller part of the fishery but I feel like we are seeding their bottom for them. Regarding predation, that might be a reason to do the gauge size change.

Mike Walsh – I'm from Cape Cod Bay. We need to be equal across LMAs. The increases and decreases between the LMAs need to be proportional.

Timothy Holmes – The two biggest problems I have are for the baseline years in the trigger index you are taking outliers in the top three years. Those outliers should be thrown out of the average. And the index should be based on a longer average. And then a 32% decline from that type of trigger index is more reasonable. I'm not opposed to more conservation measures but why measure a decline from the top three years? I agree that these lobsters move all around and Canada is going to catch our lobster and then come to sell them in Maine. Nothing should be done unless Canada does the same. With all the whale regulations, there has been a lot of talk of future trap reductions. That is a conservation effort that should be taken into account.

March 8, 2023 - Maine Webinar Hearing Attendees			
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Draft Addendum XXVII Public Hearing Summary March 9, 2023 Ellsworth, Maine

Staff: Megan Ware (ME DMR), Kathleen Reardon (ME DMR), Lorraine Morris (ME DMR)

<u>Attendees:</u> Robert Burke, Patrick Faulkingham, Jerome Briggs, Sherman Hutchins, John Renwick, John Temple, Virginia Olsen, Rand Beattie, Samantha Beattie, Bryan Bridges, John Williams, Judy Williams, William Anderson, Billy Bob Faulkingham, Tom Duym, Richard Smith, Jeff Libby Jr., Dean Beal, Roy Fagonde, Jim Hanscom, Jim Dow, Matt Knowlton, Kate O'Neal, Herman Faulkingham, Brian Jason Gordius, R. Todd Goodell, Colin Piper, Eric Beal, Joshua Beal

Overview:

- 16 commenters supported status quo on the LMA1 gauge size. Reasons given included: seeing different trends than what the surveys show, the lobster industry is facing too much adversity particularly from whale rules, and opposition to seeing gauge size changes as the only management tool.
- 3 commenters supported Option C on the gauge size, which includes breaking up the gauge size change into two steps and implementing the vent size increase at the end. There were suggestions that implementing a gauge size change in June would minimize impacts on fishermen.
- Several fishermen (both for and against) expressed concerns about market impacts of a gauge size change, particularly in regard to Canadian lobsters.

Public Comments:

Richard Smith (Beals, ME) – I support status quo. Is there a reason that the vent size needs to go bigger? I don't think the vent increase is necessary. There is enough discrepancy between our vent size now and our current minimum gauge size. We are regularly trapping lobsters over 3 3/8" as is.

John Williams (Stonington, ME) – I'm thankful that the ASMFC is managing lobsters and not NMFS. I like Option 3 (Option C) and if you do it in two steps and do the gauge increase late in the season such as June, we will never know. And I support not doing the vent increase until the end. We don't want to handle lobsters if we don't have to. Predation is another reason to do this. We lived through the last gauge size increase, and we will live through this one.

Jonathan Renwick (Birch Harbor, ME) – I support status quo. There are several issues here, including predation. I am really worried about the wind mills in the future and that will affect where everyone will fish. And there will be an impact on the lobsters from the sonic boom. Lobsters are very reactive to waves and noise in the water and if we blind the antennas, what will happen? When we had the earthquake, the lobsters disappeared for a bit. It is going to be the same with the windmills.

Bill Anderson (Trescott, ME) – I'm speaking in favor of Option 3 (Option C) which would increase the gauge in two steps with a vent increase at the end. I'm speaking in favor but I hate the thought of increasing gauges and wish there were other options. I'm concerned about what this will do to the markets. What about shipping lobsters overseas? I generally speak in favor because of the changing

conditions we have. We had basically no winter in Maine this year. Our water temperature only made it to 40°F and it used to go into the 30's. I'm hearing that the Labrador current is dying out and that is increasing out water temperature. We have to be ready for everything that is changing.

Bob Burke (Sedgwick, ME) – I support status quo. I'm concerned because in a meeting a few weeks ago we were talking about a 6-year extension but also the need to get things done now. It sounds like they have made up their minds. There is no fairness here. There are only three things that cannot be hidden – the sun, the moon, and the truth. My criteria are to look for the truth. I have read a lot of the species assessment reports. Averaging is a statistical golden rule, and you don't grab three great years and say we need to cut down from there. That means you never want to have a great year. Every fisherman, every family member, every buyer depends on this fishery being successful. And there has been 15 years of beating the hell out of the lobster fishery. It's because they are disproportionately successful. You should ask the fishermen for the data. The knowledge is out here in the audience and not on the screen. Ignorance is defined as the lack of knowledge. All you need is the willingness to learn, and someone will teach you. We also need some money in the budget for more sea sampling so we can have more daily and honest data.

Kate O'Neal (Deer Isle, ME) – I support status quo. I don't feel like you have a constant and a variable here. Every time we make a law change, that is a new variable. For example v-notching could have caused a change. Is that a variable? Have you used the migration paths of lobsters? Are those variables taken into account? There are more variables here and its not clear what is your constant.

Jim Dow (Bass Harbor, ME) – I support the third choice (Option C) and I agree with John Williams. We should make the change in June, and we wouldn't see harm. I am very concerned about the market and Canada filling in the market, but the bigger concern is for folks who fish in the grey zone. The Canadian fishermen there are going to take those lobsters that we throw over.

Jeff Libby (Beals, ME) – Status quo. We've been here for 10 years. I wish our comments really mattered. You're going to do whatever you want. I've written down the data every day in books. I don't understand your logic. I might be young, but I've been doing this and I want me kids to do this and its going downhill. No one cares. I wish people would listen.

Virginia Olsen (Stonington, ME) – I support status quo and my reason is that we have a very short time to come into compliance with the NOAA right whale regulations. If we have 5 years left and we know from the TRT it is looking like we are going to end up with 400 traps in 2028 and additional closures. How does that impact settlement? How will the existing LMA1 offshore closure or future closures impact this? If we haven't evaluated what our future fishery will look like 5 years out, I don't think we should move forward with a gauge size change now. This is an ASMFC Addendum change, but the original motion came from Pat.

Jim Hanscom (Bar Harbor, ME) – I support status quo and I agree with what Virginia Olsen said. We are facing so much adversity and a lot of unknowns with the whale rules. I think we can leave this alone. I still will insist that before Maine changes our regulations, everyone else should come to our standards. I think that should be the priority.

Herman Faulkingham (Winter Harbor, ME) – I support status quo. A multistate board of unelected bureaucrats should not be regulating fisheries on a state level. If you are going to regulate us, then you need a better plan. We need hatcheries. We are facing adversity from other regulations like a decrease

in traps. Status quo on the gauge will work. There is no need for a gauge change or vent change. It is not the right time. This is being decided by people who don't have the expertise.

Patrick Faulkingham (Winter Harbor, ME) – I agree with everything Herman Faulkingham just said and status quo. A gauge size increase is the only option?! We need other options and we need hatcheries. We had hatcheries producing thousands of baby lobsters. I don't agree with any of this.

Billy Bob Faulkingham (Winter Harbor, ME) – I am with the Maine Lobster Union and am a State Representative. I am in favor of status quo. If they start looking at a plan, then we should push this off for three years before implementation. We should be looking at historical averages instead of starting the graph off at the three record years. In the 1990's, 70 million pounds was the record catch. So we should be looking at 70-80 million pounds for the trigger level. My other concern is equity with Canada and the other states. The v-notch should be across the board and set up in a compact with Canada and the other states. And if we are going to change the gauge sizes, we should be talking about a compact with Canada on the size of lobsters. We are really good at screwing over US lobstermen for the Canadians. This makes just a much sense as the whale regulations. This is another example of us getting regulated out of business and Canada is going to benefit. This has happened with shrimp and halibut. Why continue to not let us fish? Any plan needs equity with Canada. And I urge status quo for the next three years.

Wayne? (Beals, ME) – I support status quo. I've been in the lobster business 60 years. I've been involved with shrimp, scallops, lobsters, quahogs. Years ago, I talked to someone walking along the Maine highway running for senate about a research paper on offshore factory boats. They were harvesting everything in the ocean and none of the remnants were being sent back into the oceans. When we gillnet, we catch fish but we leave some behind. My comment to the guy was we have a problem because there are no remnants of living organisms going back to the ocean. That was how we got MSA. Since then shrimping has disappeared. But we just can't panic. If we do, we might do one thing right but four things wrong. Look at the quahog business; that was the biggest industry to hit Downeast Maine. How many people are dragging quahogs now? I don't want the lobster fishery to go like the quahog fishery. Scares me when you do the landings stuff. They say statistics don't lie but liars use statistics. When this addendum gets into politics we are going to get buried. And what are we going to do Downeast? We have to do something because we cannot survive the way things are going. It's going to be Canadian lobsters that we are competing with. If you mess with markets, Canada will control the markets. And we can't compete with Canada on minimum wage. We saw a pay increase immediately with Trump and we aren't getting that help anymore. The idea of basing things on statistics scares me. We had two sheddings last year in our lobster pound. Climate change is the answer to everything now. I hope people listen to the fishermen. We can't panic.

Richard Goodell (Bar Harbor, ME) – I support status quo.

John Temple (Gouldsboro, Maine) – I support status quo.

Jason Gordius (Bass Harbor, ME) – I support status quo. I disagree with the trawl survey and your information. Things change and we are better at adapting to this change. If it doesn't work out, we move. You guys go by a set point each year. Things change and you need to change too. You'll never see what we see. All fall we throw back short lobsters. I'm see more oversized lobsters. More people are fishing offshore because the bays didn't produce this year. The landings aren't going to be right. You

don't see what we see. It's not what is on the graph. I disagree that ASMFC controls Maine lobster. 15 states shouldn't control Maine.

Sherman Hutchins (Deer Isle, ME) – I support status quo. For the ventless trap survey, anyone who signs up is trapped to a certain box/area to set the gear. They are told where they can put the traps. If you went out to 42 fathoms (instead of 30 fathoms) you would have very different data. People who sign up for the ventless trap survey should be allowed to adapt because everything moves.

Jerome Briggs (Sullivan, ME) – I support status quo.

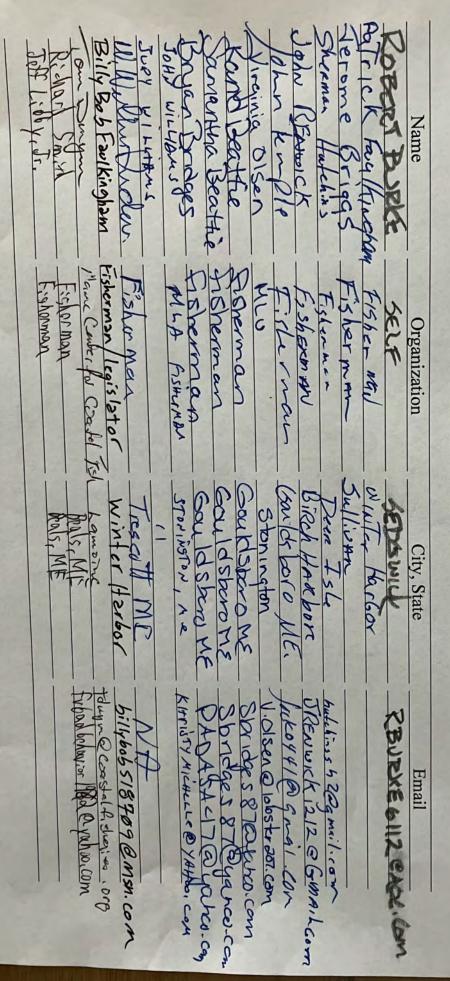
Scelter Name Descon Vea Non Ma FOCOLE Cor くらいの achsm **American Lobster Addendum XXVII Public Hearings - Sign in Sheet** Esterma ishelman (Shewryn) risher man Sherman Fisherment E, sherman FISHERMEN Organization Fishermen **Atlantic States Marine Fisheries Commission** tisherman -- PLEASE PRINT --Ellsworth, Maine March 9, 2023 NINT 2255 Bass 200 5 Deals M City, State eport 32 204 je MC ¢ my today 210. Cylamo. Col Know Han, Matts GGMa:1 AP COURD MY TANE DOWN NET olinpipes of Degmanticon, Email

American Lobster Addendum XXVII Public Hearings - Sign in Sheet

Atlantic States Marine Fisheries Commission

Ellsworth, Maine March 9, 2023

-- PLEASE PRINT --



Lobster Addendum XXVII Public Hearing Summary

Portsmouth, New Hampshire March 8, 2023 16 Public Participants

Staff and Commissioners in Attendance: Caitlin Starks (ASMFC), Cheri Patterson (NH), Dennis Abbott (NH), Doug Grout (NH), Renee Zobel (NHFG), Lt Delayne Brown (NHFG)

Public: Bobby Nudd, Pete Flanigan, Mike Flanigan, Jeff Riccio, Lou Nardello, Ward Byrne, Erik Anderson, Joshua Ford, Vincent Prien, Jim Titone. Pete Flanigan, Andrew Koncheck, Lucas Raymond, Ritchie White, Heidi Henninger

HEARING OVERVIEW

- Some attendees mentioned seeing many egg-bearing lobster under the minimum size, when they did not see those in the past.
- Three attendees commented that the v-notch definition should be standardized to zero tolerance, rather than 1/8" with or without setal hairs under Issue 1, Option B.
- Several attendees agreed that the increase in the vent size proposed would be much more detrimental to the industry than the proposed minimum gauge size increase.
- One attendee asked for a poll of the attendees to determine support for status quo versus changing the management measures. By show of hands, eight attendees supported status quo, and one attendee supported some changes.
- One attendee raised concern about water quality.

PUBLIC COMMENT SUMMARY

Bobby Nudd

- Regarding Issue 1, Option B, Sub-option B3, he would prefer to see the v-notch definition standardized to zero tolerance than 1/8" with or without setal hairs.
- In favor of Issue 1, Option B, Sub-option B4 for because it will eliminate abuse and help enforcement.
- Concerned that increasing the minimum size could decrease the marketability of lobster because some people will not be able to afford the larger lobsters.

Ward Burn

- The change in the escape vent size in LCMA 1 to 2" will be detrimental to the industry and will result in a dramatic drop in landings.
- Right now the lobster industry is under the gun from wind development, and whale risk reduction efforts, so this will hurt the industry.

Pete Flanigan

- Supports a standard v-notch possession definition of zero tolerance across the LCMAs in the stock.
- Supports Issue 2, Option A status quo for gauge and vent size. The 2" vent would be devastating to the industry.

Michael Flanigan

- Supports Issue 2, Option A status quo for gauge and vent size.
- Agrees that the standard v-notch possession definition should be zero tolerance

Vincent Prien

• The proposed vent increases will be the most disastrous part of this. It will have the most impact on catch. The industry might be able to survive the other measures but not the vent increase.

Josh Ford

- Supports status quo
- Concerned about the economic impact of increasing the minimum gauge size. People will not buy the larger lobsters. He thinks it will also drive down the permit value. More economics need to be considered.

American Lobster Addendum XXVII Public Hearings - Sign in Sheet

Atlantic States Marine Fisheries Commission

Portsmouth, New Hampshire March 8, 2023

- PLEASE PRINT -

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Draft Addendum XXVII Public Hearing Summary

New York Webinar Hearing March 14, 2023 4 Public Attendees

Staff and Commissioners in Attendance: Caitlin Starks (ASMFC), Madeline Musante (ASMFC), John Maniscalco (NY DEC), Christopher Scott (NY DEC), Jim Gilmore (NY DEC), Maureen Davidson (NY DEC), Jesse Hornstein (NY DEC),

HEARING OVERVIEW

No comments were provided.

March 14, 2023 - New York Webinar Hearing Attendees			
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Draft Addendum XXVII Public Hearing Summary

Massachusetts Webinar Hearing March 15, 2023 70 Public Attendees

Staff and Commissioners in Attendance: Caitlin Starks (ASMFC), Madeline Musante (ASMFC), Emilie Franke (ASMFC), Daniel McKiernan (MADMF), Tracy Pugh (MADMF), Matt Bass (MADMF), George Davis (MADMF), Robert Glenn (MADMF), Derek Perry (MADMF), Story Reed (MADMF), Anna Webb (MADMF), Sarah Ferrara (MA), Sarah Peake (MA), David Borden (RI)

HEARING OVERVIEW

- The majority of comments were in favor of the status quo option under both Issue 1 and Issue 2
- Two were in favor of Issue 1, Option B, with sub-option B3
- Many of those who commented had concerns that the sampling used for the proposed trigger index were not representative of the Outer Cape Cod area. In particular they noted that there is no suction sampling for lobster settlement in the Outer Cape area. Staff responded that habitat in that area is not very suitable for settlement.
- Several comments expressed concern about standardizing the v-notch definition to 1/8" and would prefer it be standardized to "no tolerance" because Area 1's v-notching requirement and zero-tolerance definition is a beneficial conservation measure
- Two people commented that they would support a minimum size increase in LCMA 1, but no change to the maximum gauge size in OCC and LCMA 3

PUBLIC COMMENT SUMMARY

Grant Moore, LCMA 3

- The percentage of large lobsters caught in SNE was minimal compared to lobsters caught in eastern part in Area 3
- Instead of maximum gauge size decrease, suggested a maximum ring size for parlor rings. Taking the maximum gauge size down to 6" would take away a 4-month fishery in the winter time.
- No comment on sub-option B1, and neutral on sub-option B2
- Supports sub-option B3 for standardizing the v-notch definition
- Does not oppose sub-option B4
- Does not support a maximum gauge decrease for LCMA 3 and OCC. It will be detrimental to all fishing in the eastern part of Area 3, and the economic impact has not been sufficiently studied.

Brendan Adams, President of Outer Cape Lobster Association

- The only reasonable option is Option A for both issues
- The standardization options seem to be only for law enforcement's benefit
- Data in this addendum is derived from Area 1 and 3 and is not accurate for OCC
- Large lobsters are estimated to be 25% of the OCC current landings and income. If the maximum gauge size is decreased, landings and income will go down by at least 25%. This loss is critical for our area because the cost of living here is much more expensive than other areas like coastal Maine.
- OCC lands less than 7% of all MA lobster, and OCC has nowhere near the impact of other areas
- Ventless trap surveys should occur in the Outer Cape, and we need to have hard data for OCC before making decisions for our area

John Todd

- Issue 1: would like to see v-notch definition standardized to the 1/8" definition because it will be easier for fishermen and enforcement. Zero tolerance is hard to deal with because it is a bit of a gray area.
- Issue 2: Supports Option A, status quo. The way things are is fine. Done a good job as an industry.
- Concerned that the economic conditions are currently difficult, and things will just keep getting more expensive. Fishermen did not make a lot of money last year. Additionally, dealing with whale rules, COVID, and international market impacts, there is a lot of strain on this industry.
- The proposed minimum gauge increase would result in a lot fewer lobsters being caught because much of what is caught just makes the current gauge.
- There are a lot of factors behind the decline, like pressure on the species by codfish, and lobster moving due to water temperatures.
- For OCC the max gauge is important and everyone will be affected by the financial impact.
- It should be considered that the number of active license holders every year has declined, meaning less gear in the water, and there is already less pressure on the resource.

Sam Pickard, Vice President of the Outer Cape Lobster Association

- Supports Option A, status quo for both issues.
- OCC has a relatively small number of harvesters; only 63 harvesters in OCC vs over 1,000 in all of MA. The number of tags per permit is also below what the state permit allows.
- Costs to fishermen for other issues (whales) are already very high, and if this addendum goes through it will severely damage the industry.
- Need for more independent data sources, and data specifically for the OCC area.
- ASMFC and states should have in person hearings in the future because there are too many technical issues with the webinar hearings.

Jeff Souza, OCC

- Supports Option A for both issues
- The current OCC management plan is working, with a higher minimum gauge than other areas and a trap tax.
- Would have supported Option E before it was changed to Option C (i.e., scheduled changes for LMA 1, but no changes to LMA 3 and OCC).
- Thinks we should make the change that would have the most impact first (i.e., raising the LCMA 1 minimum gauge size) and see what happens.

Steve Budrow, LCMA 1

- Not opposed to a minimum gauge increase
- Does not understand standardizing the v-notch definition to 1/8" for all areas. V-notching is Area 1's biggest conservation effort. Area 1 is v-notching lobsters, and the other areas are keeping them. All LCMAs should be zero tolerance.

Stephen Pickard, OCC

• The management plan for OCC should stay status quo

Olivia Stewart, OCC

- Supports status quo for all issues
- Concerns about the lack of data for OCC

William Bartlett, LCMA 1

- Supports status quo for LCMA 1
- There is too much uncertainty in the market.
- Does not want to give up the market for the smaller lobsters to Canada

Brandon Patterson, OCC

- Supports status quo only for all issues
- Taking away larger lobsters for OCC will devalue the permit in a drastic way

Ben Pickard, OCC

- Agrees with others in OCC that status quo is only reasonable option.
- Canadians can still keep lobsters above our below our legal sizes, so the gauge size changes will not help law enforcement

Chris Pickard, OCC

• Supports status quo only

Eric Lorentzen

- This action should be tabled until after the whale rules are finalized, because the whale rules will have conservation value for the lobster stock
- Increasing the minimum and decreasing the maximum gauge size will put American in a narrow box. Canada will be able to out-compete us in the market.

Faye Anderson and Brock Bobasank, OCC

• Support Option A, status quo and agree with others from OCC

Jeremy Loparto, OCC

- Supports status quo on both issues and agrees with other comments from OCC area
- The current OCC management plan is working, and we need studies to prove that

Jim Bartlett, LCMA 1

- Supports status quo for LCMA 1
- Thinks the v-notch possession definition should be zero tolerance. Does not want to see us go backward on this conservation measures.

Mike Goodwin, LCMA 1

- Agrees that the v-notch definition should be zero tolerance. LCMA 1 has done a lot of work with v-notching and does not want to see it change.
- Suggested that a hole punch could be used for more enforceability if that is the issue.

Ryan Brown

- Agrees that the v-notch definition should be zero tolerance, 1/8" is too big.
- Prefers status quo under issue 2, because a minimum gauge increase will cause a lost market to Canada

Mike Bartlett, LCMA 1

- Supports status quo
- We should not increase the v-notch or the minimum gauge size. Losing the competitive advantage to Canada will hurt Area 1 as a whole and Massachusetts.

Garrent Loparto, OCC

• Supports status quo

- Families in this area are built around the current management plan.
- If the state needs help getting information for OCC, they should ask the lobster fleet for help.

Damian Parkington, LCMA 1

- Supports status quo for both issues
- A standard v-notch definition of 1/8" will undermine benefits from a gauge increase

Sean Leach, OCC

- Supports status quo for all OCC measures.
- There is a high cost of entry for this fishery, and short window.

Ryan Drohan, LCMA 1

- Agrees with Jim Bartlett, that we should not go backwards on the v-notch. After we switched to zero tolerance in LMA 1 the catch numbers have been great and it worked.
- Could survive a gauge increase if we have to, but prefer status quo.
- Want to see more at-sea sampling from DMF, and ventless trap surveys, to align with what we're seeing day to day on the water in different areas at different times of the year

Glen Fernandes, OCC

- For Issue 1, supports status quo because the proposed actions under Issue 1 will not really help the stock.
- For Issue 2, table action on this issue until there are options that would improve SSB but also preserve the OCC fishery. None of the options currently would maintain the maximum size for OCC and LMA 3. Would have supported option E before it was changed.
- Wants to ensure a sustainable fishery, but the best way to do that is to increase the minimum gauge size in LCMA 1.
- Concerned about Canada still being able to supply 3 ¼" lobsters to the US

Michael O'Brien, OCC

• Supports status quo for both issues

Raymond Joseph, OCC

• Supports status quo for both issues and agrees with other comments on the OCC issues

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Draft Addendum XXVII Public Hearing Summary

Massachusetts In-Person Hearing March 29, 2023 35 Public Attendees

Staff and Commissioners in Attendance: Daniel McKiernan (MADMF), Tracy Pugh (MADMF), Matt Bass (MAMEP), Robert Glenn (MADMF), Story Reed (MADMF), Julia Kaplan (MADMF), Kerry Allard (MADMF), Raymond Kane (Chairman of DMF's MFAC), Chris Markey (MA), Sarah Peake (MA), Sarah Ferrara (MA)

HEARING OVERVIEW

- The majority of comments were in favor of the status quo option under both Issue 1 and Issue 2
- Many of those who commented had concerns that the sampling used for the proposed trigger index were not representative of the Outer Cape Cod area. In particular they noted that there is no suction sampling for lobster settlement as well as ventless trap surveys in the Outer Cape area.
- Several comments expressed concern about standardizing the v-notch definition to 1/8"
- There were a couple of comments of concern about not the non-reversible nature of the trigger index (no option to go back to regulations the way they were if conditions improved).

PUBLIC COMMENT SUMMARY

Brendan Adams, OCC – speaking on behalf of the Outer Cape Cod Lobster Association

- Support for status quo on both issues
- Against standardization of lobster regulations
- Would like to see more data collected in regard to YOY lobsters, including ventless trap surveys on the Outer Cape.
- Expressed concern over loss of income due to new regulations especially with an increased cost of living.
- Expressed concern over loss of permit value due to decreased landings that will occur if status quo is not chosen
- Expressed concern over the decline of lobster permits issued for OCC

Dana Pazolt

• Wanted no lobsters landed in MA during the closed season

Chris Markey, state rep and Atty. for Outer Cape Cod Lobster Association

- Putting regulations in place will reduce catch for local lobstermen and ultimately effect local businesses including local banks that have invested in the lobstermen's permits and boats
- Advocated for status quo measures

Garrett Lopardo, OCC

- Expressed concern over loss of trap tags related to the 'transfer tax' where 10% are removed with tags transferred to the new owner. He stated if measures were implemented then the trap tags lost due to partial transfers should be given back.
- Wanted DMF to consider predation as a reason for the reduction in YOYs

Sam Pickard, OCC fishermen and speaking on behalf of OCC Lobstermen's association

- Expressed frustration over time-period closures and the loss of revenue attributed to the closures
- Questioned the validity of the data used for the stock assessment and asked for better data from Outer Cape
- Expressed frustration over a portion of permit funds being allocated to ventless trap surveys when the outer cape is not included in the ventless survey.
- Expressed support for status quo

Edward Wiessmeyer, LMA1

• Wants DMF to consider re-open lobster hatchery

Mike O'Brien, OCC

• In support of status quo

Tyler, marine biology graduate from Outer Cape

- Would like to see error bars on the graphs
- Expressed concern over uncertainty in data

John, OCC

- Advocated for ventless surveys on the Outer Cape and expressed concern over the validity of the data
- Supported status quo measures only

Brendan Patterson, OCC

• Is in support of status quo and doesn't want anything changed without more data

Sean Leach, OCC

- 2-4% loss in landings would be drastic in regard to income
- Expressed concern over feasibility of running a business with regulation changes
- In support of status quo

Jeff Souza, OCC

- Status quo for issue 1
- Wants an actual definition for v-notch
- Status quo for issue 2
- Advocated for one change and then see what happens to know what is working what isn't

Steve Pickard, OCC

- Wants ventless trap survey used in outer cape, gaps in data
- Supports status quo due to lack of data from outer cape

Chet Piccard, OCC

- Believes his landings will drastically decrease if regulations were to be implemented
- Hard shell lobster is primarily caught on OCC and more capable of being shipped
- Advocated for status quo

Chris Pickard, OCC

• Advocated for status quo

Arthur Pickard, OCC

• Advocated for data on the outer cape

Ben Pickard, OCC

- Advocated for status quo
- If any measures were taken, one aspect should be taken at a time considering livelihoods are at stake

Steve Smith, OCC

- Proposed getting rid of v-notch rule completely
- Status quo for OCC
- Change in options to eliminate v-notching, increase minimum size and get rid of maximum size

Fred Penney, Boston Harbor

- One size doesn't fit all and measures implemented should reflect that. Measures that would work for OCC won't work for LMA1
- Increase in gauge size would be detrimental to Boston lobstermen
- Did not see the point in an increased vent size with increased gauge size

Eric Meschino, LMA1

- Not for status quo
- Reduce gauge size and get rid of oversize all together

Eric Lorentzen, LMA1

• Support for status quo

Jim Bartlett, LMA1

• Status quo

Mike Malewicki, Beverly

• Status quo

Dave Casoni, LMA1

• Status quo

Peter Kandrick, Sandwich, MA

• Agrees with Eric Meschino, if climate is changing and the fishery won't be viable then the lobstermen should be able to fish as is

Mike Polisson, LMA1

- Wants status quo
- Does not think data goes back far enough and is concerned about the economic impacts

March 29, 2023 - Massachusetts In-Person Hearing Attendees			
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Dave	Casoni	MA	
Mike	Malewicki	Beverly, MA	
Peter	Kendrick	Sandwich, MA	
James	Kendrick	Sandwich, MA	

Draft Addendum XXVII Public Hearing Summary Rhode Island Webinar Hearing March 16, 2023 6 Public Attendees

Staff and Commissioners in Attendance: Caitlin Starks (ASMFC), Madeline Musante (ASMFC), Corinne Truesdale (RIDEM), Scott Olszewski (RIDEM)

HEARING OVERVIEW

• One attendee asked a question about impacts on recreational lobster fishing related to right whale regulations.

PUBLIC COMMENT SUMMARY

No comments were provided.

March 16, 2023 - Rhode Island Webinar Hearing Attendees			
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April 5, 2023

Caitlin Starks Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200A-N Arlington, VA 22201

Dear Caitlin,

I'm writing as a representative of the Atlantic Offshore Lobstermen's Association to provide comments toward Lobster Draft Addendum XXVII. Generally, the Association supports actions that will increase the resiliency of the Gulf of Maine/Georges Bank (GOM/GBK) lobster stock and encourages the Lobster Board to move expeditiously to approve options that appropriately address the worrying trends in recruitment indices. Draft Addendum 27 is six years in the making and includes options that, if selected, would not be fully implemented for another five years. While the Board needs no reminder of the consequences of insufficient and delayed action in Southern New England (SNE), to put a fine point on it in SNE young-of-the-year (YOY) indices began to decline five years before the precipitous landings decline. In the GOM, YOY indices have shown unfavorable conditions for the last nine years and landings have been declining for six years.

Below I provide comments specific to the options proposed for LCMA3. If measures are implemented in the area, the Association supports the Draft Addendum's position that measures would apply to all LCMA3 permit holders, regardless of stock fished or home port state.

Related to <u>Issue 1</u>, measures to be standardized upon final approval of the Addendum, the Association encourages the Board to select the action option, Option B. Specifically:

Sub-option B1: No comment, given that this sub-option would not impact LCMA3.

Sub-option B2: The Association takes a neutral position on this sub-option. However, it should be noted that a portion of LCMA2 falls within the GOM/GBK stock and current LCMA2 regulations are inconsistent with the proposal for this sub-option. Therefore, as written, sub-option B2 would not standardize a v-notch requirement across the stock area. It is also important to note that v-notching is an unenforceable mandate, so the conservation value of this proposed measure would be dependent on the level of at sea participation.

Sub-option B3: The Association supports standardizing the v-notch definition. If approved, this would create a standard definition across all seven LCMAs in both state and federal waters.

Sub-option B4: The Association does not oppose this sub-option, however a small initial replacement allowance, that is less than the current 10%, would likely be easier to administer for States that do not already hold back replacement tags. If approved, this measure would need to be enacted for all of LCMA3, which would require revision to NH, MA, RI, and NMFS's trap tag distribution procedures.

Related to <u>Issue 2</u>, measures to increase protection of spawning stock biomass (SSB), the Association encourages the Board to select an action option that is appropriate to the magnitude of documented recruitment declines and is implemented without undue delay. That said, the Association opposes the proposed LCMA3 maximum gauge change, reflected in various forms in the Issue 2 sub-options, because we don't feel the conditions of the offshore stock and fishery warrant a permanent loss of landings.

Currently, LCMA 3 landings include a broad range of lobster sizes, unlike the inshore and nearshore lobster fishery which is recruitment-driven (Draft Addendum XXVII, Appendix B). The LCMA3 fishery exhibits the characteristics of a resilient stock with no growth overfishing, a fishing mortality rate eight times lower, and landings 30 times smaller than in LCMA1¹. The proactive measures taken LCMA3-wide in response to the SNE collapse established the existing maximum gauge in 2008 (Addendum XXI) and increased the minimum gauge in 2012 to 3 17/32", which is above L50 (Addendum XXVII). Conversely, the LCMA1 minimum gauge last changed in 1989, an action that predates the ASMFC's interstate fishery management plan. LCMA3 has also reduced effort, as measured by allocated traps, by ~50% since 2002, when historic participation was enacted in the limited access fishery.

As noted by Bob Glenn, Deputy Director MADMF, in a 2021 letter to the Addendum's Plan Development Team, the analysis in Draft Addendum XXVII Appendix B is based on the relative size of landings in each fishery and indicates:

"...that a maximum size of 6" in LMA3 would result in an 8% increase in SSB per recruit, and a minimum size of 3 3/8" in LMA1 would result in a 38% increase in SSB per recruit. What this means in rough absolute terms (using 2018 landings) is 8% of roughly a 4,400,000 lb. exploitable biomass in LMA3, versus 38% of roughly a 130,000,000 lb. exploitable biomass in LMA1... In absolute terms the options in the addendum for LMA3 and LMAOCC will only have a fractional, if not immeasurable, impact on increasing stock wide SSB." Mr. Glenn further notes that decreasing the maximum gauge in LCMA3 would provide only "...extremely modest gains in spawning stock biomass at the expense of permanent loss in yield to the fishery".¹

The Association firmly opposes decreasing the maximum gauge in LCMA3 as part of this Addendum. However, if future indices warrant additional action, we encourage the ASMFC to evaluate, as a follow-on Addendum, either a ¹/₄" decrease of the LCMA3 gauge or a 7" trap entrance ring requirement. Entrance rings select which sized lobsters can access the trap, so it is a valid approach to protect large individuals and reduce trap cannibalism and discard mortality.

Thank you for the opportunity to comment.

Heidi Henninger Deputy Director

¹9/17/21, Bob Glenn, MADMF as representative of the PDT "Draft Addendum XXVII on Gulf of Maine/Georges Bank Resiliency" memo to Caitlin Starks

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April 8, 2023 Via Email: comments@asmfc.org

Caitlin Starks Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200A-N Arlington, VA 22201

Re: Lobster Draft Addendum XXVII

Dear Ms. Starks:

Please accept these comments on behalf of Little Bay Lobster ("LBL") of Newington, NH and its affiliated companies. ¹ For the following reasons, LBL contends that the proposed measures are unnecessary at this time, scientifically unsupported, premature in light of the upcoming population assessment and ill-timed given other pressures the American Lobster Fishery is facing.

<u>The Proposed Measures Are Ill-Timed Given Other Issues Facing The American Lobster</u> <u>Fishery</u>

The American Lobster fishery is facing an existential threat, and anything that reduces fishing earnings now is ill-timed in light of the existential threat facing the lobster fishery in light of recent developments involving north Atlantic right whales. In litigation in Washington, Judge Boasberg has declared the current Biological Opinion under which the fishery was operating was not legally sufficient,. If vacated, the American Lobster fishery would then be in violation of the ESA and MMPA and could possibly be shut down. Judge Boasberg initially suggested that he might order NOAA to update the BiOp and bring the fishery into compliance by December of 2024. NOAA has asserted that the only method by which it can currently achieve the required Negligible Impact Determination to bring the fishery into compliance is through implementation of ropeless gear, which the Agency states cannot be implemented prior to 2030. In effect this would lead to a presumptive closure of the lobster fishery in 2024, a sundown provision, unless the Court amended its decision prior to December 2024.

¹ Little Bay Lobster and its affiliates constitute the largest single harvesting group in LCMA 3, comprised of 14 harvesting vessels, and is one of the largest lobster dealers in the Northeast.

STEPHEN M. OUELLETTE, ESQUIRE

Caitlin Starks Atlantic States Marine Fisheries Commission April 8, 2023 -2-

The provisions of the Omnibus Budget Act of 2022 have given some relief from the Boasberg Decision, by deeming the fishery in compliance through 2028, which will require NOAA to implement new rules prior to then, still short of when NOAA predicts it can implement its preferred method of ropeless gear. At present, the only other option is widespread closures. Either of these options will severely limit fishing effort and reduce profitability at a time of substantial uncertainty as to the future of the fishery and should not be implemented at this time.²

In the face of these obvious harsh future impacts on the fishery, the measures proposed in Addendum XXVII are ill-timed and unnecessary.

<u>Measures Proposed Altering Lobster Size Limits For LMA 3 Are Not Scientifically</u> <u>Substantiated And Should Not Be Adopted Or Should At Least Be Deferred Until After</u> <u>The 2025 Population Assessment</u>

The Addendum document repeatedly notes that neither the GB or GOM lobster stocks are overfished and overfishing is not occurring. Instead, the measures are based on the assertion that certain factors "... could indicate future declines in recruitment and landings..." Page 3, but there is actually no such quantification for LCMA 3. In reality, the measures appear more to meet the objective of standardizing management measures across the LCMAs. While perhaps easier to enforce, it fails to take into account variations and contingencies in the fishery-largely reflected in the different makeup of populations of lobsters in various areas, and the needs of fishermen in different areas. LBL believes this is especially true in the measures proposed for LCMA 3 and suggests that these measures not be adopted.

With regard to LCMA 3, the Addendum notes that the population assessments are being assessed using only the inshore surveys, as this is where the majority of fishing activity occurs. This hardly recommends these assessments as indicative of the conditions in the deeper offshore waters of LCMA 3. As the stock has apparently moved further north and east in the face of warming water and other environmental conditions, the stock in LCMA 3 has remained stable or increased with steady catch per unit of effort. There is no scientific justification for further increasing minimum sizes or reducing maximum sizes it this area. The Addendum document notes that the catch in LCMA 3 is spread across the current slot range, and not recruitment driven, meaning that most of the catch is in the middle of the slot size. Changes in the minimum and maximum size will not increase recruitment of or give significant numbers of smaller lobster

² The proposed Addendum makes note of a substantial increase in the value of ex-vessel landings in 2021. This was due largely to an unusually strong demand for lobster during the pandemic. Prices have returned to close to prepandemic levels and are not expected to surge again anytime soon.

STEPHEN M. OUELLETTE, ESQUIRE

Caitlin Starks Atlantic States Marine Fisheries Commission April 8, 2023 -3-

additional time to spawn, nor will it result in more lobsters sizing out of the fishery. The sole impact of the proposed size changes will be to reduce the landings for LCMA 3 fisheries, with no positive impact on conservation. As noted by Bob Glenn, Deputy Director of MADMF, in a 2012 letter to the Addendum's Plan Development Team, the analysis in Draft Addendum XXVII Appendix B is based on the relative size of landings in each fishery (LCMA) and indicates:

"... In absolute terms the options in the addendum for LMA3 and LMAOCC will only have a fractional, if not immeasurable, impact on increasing stock wide SSB." Mr. Glenn further notes that decreasing the maximum gauge in LMA3 would provide only " ... extremely modest gains in spawning stock biomass att he expense of permanent loss of yield in the fishery".³⁴

As the The LCMA 3 fishery is dramatically different than the other areas, with less concentration of fishing effort based on early implementation of trap limits factoring in historical use and earlier implementation of limited access. It has developed around a range of lobster sizes and nothing justifies alteration of the nature of this fishery by changing minimum or maximum sizes, absent a strong scientific basis, which is not present in the proposed Addendum. Similarly, there is no reason to modify vent sizes.

Perhaps the new population assessment in 2025 will shed more light on the need for or advisability of these proposed measure, although we suggest the situation is stable, nothing is broken and there is nothing to fix, and there are still unresolved issues, such as reductions in LMA3 trap limits, prospective regulations to protect right whales, etc...

LBL supports Standardization for V-Notch Regulations.

LBL is supportive of standardizing V-Notch rules. These have proven effective at protecting breeding females and in turn have a measurable impact on SSB. Present rules do create confusion based on different rules in the various areas LMAs.

Conclusion

For the reasons, and those set forth above, Little Bay Lobster suggests that the measures proposed in Addendum XXVII to Amendment 3 to alter minimum or maximum lobster sizes are

³ 9/17/21, Bob Glenn, MADMF as representative of the PDT "Draft Addendum XXVII on Gulf of Maine/Georges Bank Resiliency" memo to Caitlin Stark.

⁴ LBL also notes that the ASMFC has proposed reductions in Area 3 trap limits, opposed and potentially to be challenged by LBL if implemented, which would further result in permanent loss of yield in the fishery.

STEPHEN M. OUELLETTE, ESQUIRE

Caitlin Starks Atlantic States Marine Fisheries Commission April 8, 2023 -4-

not supported by the science and that the impact to fisheries in terms of permanent loss of yield to the fishery is not justified by the science even if it marginally aids enforcement through uniformity of measures. These differential sizes are between LMAs are justified by the different nature of the stocks between areas and the different manner in which the fisheries in the LMAs have been managed over time.

Thank you for the opportunity to comment on these proposed changes to regulations and your attention in this regard.

Very truly yours,

/s/Stephen M. Ouellette Stephen M. Ouellette, Esq.

cc.



Caitlin Starks Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200A-N Arlington, VA 22201

April 8, 2023

Dear Ms. Starks:

The Maine Lobstermen's Association (MLA) provides these written comments in response to ASMFC's Draft Addendum 27 to Amendment 3 to the American Lobster Fishery Management Plan for Public Comment. The MLA was founded in 1954 and is the oldest and largest fishing industry association on the east coast. The MLA advocates for a sustainable lobster resource and the fishermen and communities that depend on it.

The MLA appreciates ASMFC's commitment to work with the lobster industry to maintain a resilient lobster stock and fishery. The MLA supports the Commission's original goal to standardize measures across Lobster Management Areas (LMAs) as the most important first step in maintaining a resilient lobster fishery as outlined in Issue 1. While the MLA recognizes that there has been a downturn in several stock indices which must be closely monitored, the association does not believe trends warrant management action at this time as outlined in Issue 2. The MLA is very concerned that the addendum does not include any analysis of the impacts of gauge changes on the lobster market, yet its purpose is to keep the lobster industry economically viable.

Issue 1: Standardizing measures across LMAs

The MLA supports Option B to standardize measures to be implemented upon final approval of the addendum. Each of the sub options outlined in the document are preferable to the status quo. V-notching female lobsters and protecting oversize lobsters are core conservation values for every Maine lobsterman. MLA believes any person permitted to harvest lobster should be required to adopt these protections. The MLA recommends that ASMFC consider the following measures for adoption by all lobstermen in all management areas:

- Mandatory v-notching.
- Zero tolerance v-notch definition. Maine has a long track record demonstrating that this standard is enforceable. Maine lobstermen believe that mandatory v-notching with a zero tolerance definition have contributed significantly to increase in abundance of the lobster stock.

- Maximum gauge required. In addition to 6 ¾" standardized maximum gauge for all areas (or more restrictive), the MLA recommends that ASMFC also restrict the landing of lobsters from 5" to 5 ½" carapace length across all areas. Allowing more lobsters to reach 5 ½" carapace length will enhance the impact of the Area 1 maximum gauge by allowing more lobsters to reach larger sizes if they migrate to the Area 3 or OCC fishery.
- Do not issue surplus trap tags unless trap loss is documented.

Issue 2: Implementing management measures to increase protection of SSB

The MLA supports Option A, Status Quo, that there will be no changes to the current fishery. The MLA does not dispute that increasing the LMA 1 gauge could help to expand overall lobster abundance. However, the MLA has several concerns with the proposed changes and believes that this action is premature.

Market concerns

A primary objective of this addendum is to keep the lobster industry economically viable, yet the document does not contain any analysis of the market impacts of a gauge increase, particularly the disparity that will be created between the minimum size in Canada versus the minimum gauge in LMA 1. The Canadian lobster fishery comprises a significant component of the American Lobster supply chain. Canadian lobster supply impacts the overall lobster market including prices paid to U.S. lobstermen. Changing the minimum gauge size in LMA 1 will impact lobster supply and potentially create an advantage for Canadian product.

The 2021 and 2022 lobster seasons have demonstrated that market conditions manifested through boat price for lobster can impact the economic stability of the lobster industry as much, if not more than volume of lobster landings. The MLA agrees with the Commission that "given the economic importance of the lobster fishery to many coastal communities in New England, especially in Maine, potential reductions in landings could have vast socioeconomic impacts," but we must also be vigilant to not undermine the U.S. position in the lobster market.

Potential trade issues arising from the Magnuson Act prohibition on the import and sale of lobsters smaller than the U.S. minimum were raised when the previous draft of Addendum 27 was released, yet this issue is not addressed in the updated addendum. MLA understands anecdotally that ASMFC has determined the proposed increases to the LMA 1 minimum gauge will not impede lobster imports from Canada, however, this information is not (but should be) included in the addendum.

Resolving the import issue does not address how changing the minimum size for LMA 1, which accounts for the vast majority of U.S. landed lobster, will affect U.S. markets if Canada's minimum gauge remains unchanged. The largest concern raised by MLA members was that changes to the LMA 1 minimum gauge could negatively impact the boat price for U.S. caught lobster. The MLA strongly opposes any change to the LMA 1 minimum gauge until a market study has been conducted to address impacts on demand, market segments, and boat price given that comparable gauge measures will not be adopted in Canada.

The Commission must also recognize that downeast Maine lobstermen fish side by side with Canadian lobstermen who harvest lobster under a different management program. Under the

Addendum 27 proposals, Maine lobstermen will be throwing back short lobsters that will be quickly caught and landed by their Canadian counterparts who fish in LFA 38B. These smaller lobsters may then be sold to U.S. dealers and may drive down boat price.

Action is not needed at this time

The MLA does not dispute the Commission's findings that "settlement surveys for more than five years have consistently been below the 75th percentile of their time series" and "there is evidence of declines in recruit abundance in ventless trap survey and trawl surveys for the GOM/GBK stock since the most recent stock assessment."

However, the MLA is concerned that the reference period used to measure a stock decline includes only 3 years, particularly when one of the years is an all time high. The MLA recommends using a longer time series that includes a broader representation of lobster abundance as a reference period. For example, 2003 to 2018 would reflect a high moderate to high abundance time frame and is more realistic than basing the reference period on a narrow time frame skewed by a historic high.

MLA members also have questions regarding what the survey results actually mean for the future of the fishery. MLA members question whether declines in inshore settlement accurately reflect overall stock settlement given record abundance of older, larger lobsters and expansion of the fishery into deeper offshore waters. While there has been some effort to sample deeper water habitats not currently sampled, significantly more research is required to determine the contribution of unsampled habitats to the overall stock productivity. The MLA is also concerned that the most recent ventless trap and trawl surveys were hindered by covid restrictions. Additional data is needed for all of these surveys before any management action is undertaken.

Addendum 27 was not initiated in response to a stock decline but rather is a proactive measure to avoid economic harm by avoiding a stock decline. It The October 2020 stock assessment states that "Gulf of Maine-Georges Bank (GOMGBK) stock was not depleted, as the three-year average abundance from 2016-2018 was greater than the abundance target. The stock was at record high abundance levels. Stock projections conducted as part of the assessment suggested a low probability of abundance declining below the abundance target over the next 10 years."

Lobstermen continually report that are seeing strong year classes on the bottom, along with huge numbers of eggers and v-notch lobsters. Lobstermen are also facing extreme regulatory uncertainty due to future whale rules. They do not believe that it is necessary to increase the gauge at this time.

Equity issues

The LMA 1 fishery is by far the largest sector of the U.S. lobster fishery. The stock has remained healthy despite high exploitation rates due to the strength of the conservation measures and excellent compliance by the industry. Maine lobstermen strongly believe that the lobster stock could not have achieved record abundance if not for the conservation measures they have implemented over many decades including minimum and maximum size, v-notching with a zero tolerance definition, and only allowing lobster landings from trap/pot gear.

Indeed, the 2020 stock assessment report notes that large female lobsters migrate between the Gulf of Maine and Georges Bank. This finding was the basis of combining the GOM and GBK stocks into a single stock unit. The assessment suggested that small, immature females were recruiting to the GOM and then migrating back and forth between the GOM and GBK after growing to larger sizes.

It is the conservation measures adopted by LMA 1 lobstermen that are largely responsible for stabilizing and expanding the lobster stock in both the GOM and GB stock areas. Yet LMA 1 lobstermen would be most impacted by the measures proposed in Addendum 27. If action is taken, the MLA recommends that the Commission require mandatory v-notching with a zero-tolerance definition for all LMA 3 and OCC lobstermen so that LMA 1 lobstermen are not protecting these lobsters only to have them caught and landed by their colleagues. The MLA also recommends that the Commission consider disallowing Area 3 and OCC to land lobsters with a carapace length of 5 to 5 $\frac{1}{2}$ " inches. Protecting lobsters to grow through this $\frac{1}{2}$ " window just above the Area 1 maximum gauge would provide a lot more protection than having only a maximum gauge of 6" or 6 $\frac{3}{4}$ ".

Other considerations

Any gauge increase for LMA 1 must be implemented gradually and not exceed increments of 1/16'' annually. If a gauge increase is moves forward, the implementation schedule must allow the industry adequate time to prepare for the changes.

The Commission should consider an increase in the vent size, rather than a gauge increase, to minimize potential market impacts and equity issues of Maine lobstermen throwing back lobsters that can be immediately caught and sold by Canadian lobstermen.

In closing

ASMFC should move forward with standardizing measures across the LMA's as proposed in Issue 1. The MLA supports the Commission's overarching goal with regard to Issue 2 but does not believe this is the right time to take this action. Given that the lobster stock remains in a favorable abundance regime, ASMFC must first conduct a study of the market impacts of changing the LMA 1 gauge, particularly to understand trade dynamics between the U.S. and Canada. This would allow time to consider expanding the reference period and collect more survey data to survey deeper waters and fill in for the poor covid years. It will also allow the lobster industry to prepare for the extreme regulatory uncertainty it faces due to future whale rules.

Thank you for your consideration.

Best regards,

Patrice Mc Carron

Policy Director



Massachusetts Lobstermen's Association

8 Otis Place ~ Scituate, MA 02066 781.545.6984

April 3, 2023

Caitlin Starks Atlantic States Marine Fisheries Commission 050 N. Highland St. Suite 200A-N Lobster Arlington, VA 22201

Via Email: comments@asmfc.org

RE: Draft Addendum XXVII

Dear Ms. Starks,

The Massachusetts Lobstermen's Association (MLA) submits this letter of comment and great concern on behalf of its' 1800 members on the: Atlantic States Marine Fisheries Commission (ASMFC) Draft Addendum XXVII (Add. XXVII) to Amendment 3 to the American Lobster Fishery Management Plan for Increasing Protection of the Gulf of Maine/Georges Bank Spawning Stock (GOM/GBNK SS).

Established in 1963, the MLA is a member-driven organization that accepts and supports the interdependence of species conservation and the members' collective economic interests. The membership is comprised of fishermen from Maryland to Canada and encompasses a wide variety of gear types from fixed gear and mobile gear alike. The MLA continues to work conscientiously through the management process with the Massachusetts Division of Marine Fisheries (MADMF), Atlantic States Marine Fisheries, Atlantic Large Whale Take Reduction Team, and the New England Fisheries Management Council to ensure the continued sustainability and profitability of the resources in which our commercial fishermen are engaged in.

The commercial lobster fishery, active effort, in Massachusetts continues to decline and each year is losing an estimated 8 to 10 permits a year with NO NEW PERMITS being issued. Massachusetts has a limited entry fishery that is continually reducing effort on the resource. To further help conservation on the resource there are two Lobster Management Areas (LMA) in Massachusetts that have even more conservation measures in place to further protect the resource through a 10% Trap Tax on trap tag transfers. This measure alone has reduced the effort by tens of thousands of traps from being fished.

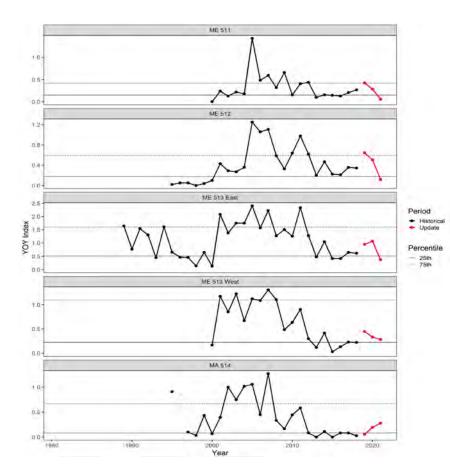
Coastal Lobster Permits & Activity Status by LMA

Permit Type	Active Status	LMA	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	1.1.1.1.1	LMA1	671	661	643	616	615	616	619	620	619	585
	Active	LMA2	69	68	65	63	53	59	66	60	54	54
A	1.	OCLMA	68	68	65	69	65	61	60	58	56	62
Total	Latent	LMA1	479	435	411	414	405	392	379	366	366	383
Inshore Permits*		LMA2	90	87	81	79	83	77	66	67	67	72
Permits		OCLMA	18	19	21	19	19	18	16	18	18	16
	Total Issued	Active	808	797	773	748	733	736	745	738	729	701
		Latent	587	541	513	512	507	487	461	451	451	471
	Issueu	Latent	507	341	515	512	507	407	401	451	451	471
	Inches							-				Marine
March 3		1.2023		Division (of Marine	Fisheries				Slide 2	22	-

Recently, during the MLAs Annual Weekend & Industry Trade Show, the MADMF gave a presentation on the entire lobster industry here in the Commonwealth and as the data is presented in Slide 22, Coastal Lobster Permits & Activity Status by LMA depicts the effort is clearly trending downward to a mere 647 active permits that are fishing on the GOM/GBNK SS stock. As the overall effort continues to decline in Massachusetts, as indicated by the MADMF Lobster Tables data on the lobster effort from 2004 and 2021 for LMA 1 and Outer Cape Cod (OCC). The Massachusetts commercial lobster effort has significantly reduced its effort from an estimated high of 1328 total permits in 2004 to total 755 in 2021. That is nearly a 43% reduction in active effort with NO NEW EFFORT being fished on the GOM/GBNK SS.

The impact of the Massachusetts commercial lobster industry is marginal on the resource and the effort continues to decline. There are NO Options in Add. XXVII that the MLA can support. Addendum XXVII is not a one size fits management plan as it is presented. More data is needed to truly understand where the negative impacts are on the resource.

Furthermore, after reviewing Add. XXVII, the many Public Hearings and the scores of comments that were provided all pointed out a critically important gap in data for areas in the OCC and Eastern Cape Cod Bay. These data gaps need to be filled before Add. XXVII is moved forward to ensure ALL the data is included before a permanent management measure is implemented. These areas that historically have not been surveyed are highly productive and landings from these areas remain relatively consistent. The MLA strongly recommends putting Add. XXVII on hold until these data gaps are filled to give a much clearer picture of what is truly happening to the settlement here in the Commonwealth.



should Add. XXVII be passed.

(ASMFC Figure 4. GOM abundance indicators: YOY indices.)

During the recent Public Hearing on April 29th, the main question asked was on Figure 4 that depicts the trends in the Young of the Year (YOY) settlement and, why is Massachusetts being asked to do anything when MA Stat Area 514 it clearly showing the settlement trend in the Commonwealth is going up even with missing data as noted above.

The MLA encourages that these data gaps be filled and once they are filled from these highly productive and critical areas, the consensus from the industry is that the YOY settlement index will go up even more.

The MLA is extremely concerned that the approximate 670 active LMA1 & OCC commercial lobstermen are going to be negatively and irreparably harmed The Massachusetts Lobstermen's Association proudly supports the letters of comment submitted to the Atlantic States Marine Fisheries Commission on Addendum XXVII from the Atlantic Offshore Lobstermen's Association and the Outer Cape Lobstermen's Association.

For the reasons noted above, the Massachusetts Lobstermen's Association can only <u>SUPPORT STATUS</u> <u>QUO ON ALL OF THE OPTIONS.</u>

Thank you for your thoughtful deliberation and consideration on our comments.

Sincerely, **Beth Casoni** MLA, Executive Director 555 PLEASANT STREET, SUITE 5A New Bedford, MA 02740

Christopher M. Markey, Esq. cmarkeylaw@gmail.com

April 8, 2023

Caitlin Starks Atlantic States Marine Fisheries Commissions 1050 N. Highland St. Suite 200A-N Arlington, Virginia 22201

Email: comments@asmfc.org

Re: Addendum XXVII to Amendment 3 American Lobster Fishery Management Plan

Dear Ms. Starks:

As you may know my office represents the Outer Cape Cod Lobstermen, and I write to implore the Atlantic States Marine Fisheries Commission ("ASMFC") to keep the status quo as it related to Addendum XXVII. The Outer Cape Cod Lobstermen is a group of approximately sixty members. Some members retain only state permits while others have both federal and state permits. The lobstermen harvest in the Outer Cape Cod LCMA ("OCC"). The OCC is a unique fishing parcel. It is made up of the tip of Cape Cod around Provincetown and sits between outer Cape Cod and George's Bank Fishing Area. Most of the lobstermen in the OCC utilize the single-line single-pot harvesting system.

The status quo will continue to protect the growing lobster stock in the OCC and will allow the lobstermen of the OCC to maintain the successful niche market of large, hard-shelled lobsters word wide. In addition, the status quo is not a burden to law enforcement officials. Any change in the regulations will be arbitrary and capricious because they are not based on science. The only study relied upon supports the status quo.

While we all appreciated the opportunity to speak at a public comment meeting on March 28, 2023, in Quincy, Massachusetts, we feel it imperative to have a written record of our concerns of Addendum XXVII. During that hearing, Massachusetts Department of Marine Fisheries ("DMF") biologist, Robert Glenn, described the LCMA OCC as a "dynamic" environment which makes breeding of the lobsters very unlikely. Rather, the lobsters harvested in the OCC are transient lobsters, passing from LCMA Area 1 to GOM/GBK stock. Mr. Glenn further described the transient lobsters passing through the OCC, as being more mature, larger, molted, and hard shelled, unlike the typically smaller lobsters discovered in LCMA Area 1 and Area 2.

Since the OCC acts as a conduit for mature lobsters to pass from the warm waters of the Cape Cod Bay into the open ocean, the current regulations reflect a balance between the economic interests of the lobster fisheries and the conservation of the lobsters. Over twenty years ago the ASMFC and the OCC lobstermen realized this uniqueness and created regulations to meet the needs of economic and conservation interests. The results of the agreement resulted in (1) OCC lobstermen ten percent (10%) tax on all license transfers; (2) increase in the minimum size of the lobsters to 3 3/8th. Further, the right whale population has Page 2 April 8, 2023 OCC Letter to ASMFC

delayed the start of the season from March 15 to May 15. As a result, (a) the transfer tax has limited the number of pots in the ocean; (b) the shorter season has limited the number of days for harvesting; and (c) and the increase in minimum size imposed has grown the lobster population in the OCC. The greatest example of the success of this Young of the Year ("YOY") in Massachusetts. The was an increase between 2017-2020 consistent with later 1990's.¹

The increase in the YOY stock in Massachusetts over the past several years is yet another reason why the status quo is the appropriate action of the ASMFC. The study relied upon by the ASMFC indicates that the YOY has increased in Massachusetts, while in Maine's four areas there was a decrease during the same time frame.² The increased change in the YOY in Massachusetts dictates no need to change any of the regulations. The status quo has proven to be an effective tool to conserve lobsters in Massachusetts.

The status quo also protects the niche economic market the OCC lobstermen developed. The OCC have created a world-wide market of hard-shell large lobster. The lobstermen of the small ports of outer Cape Cod have created an infrastructure that harvests, lands, and delivers live hard-shelled lobsters to the Far East to Western Europe. The many OCC lobstermen invested in building larger half-moon pots which harvest large lobsters and invested in transportation and local cold storage to assure prompt and fresh delivery of large lobsters world-wide. These investments have been made by both first, second and third generation lobstermen. As a result, there is a great diversity as to the forms of financing of the permit holders. The banks and promissory note holders who have invested in this niche market and rely heavily on the status quo of the regulations.

If the regulations are changed in accordance with the proposed Addendum XXVII, this niche market would move to Canada. The changes in the regulations would create a maximum size that would not satisfy the demand of the Asian and European markets. The change in regulations would eliminate the OCC and move the entire supply to Canada.

The proponents of the Addendum XXVII have stated law enforcement needs to have consistency in the regulations. However, at the March 28, 2023, hearing an environmental police office stated there is no issue with enforcing the current regulations. In the Spring of 2023, federally permitted OCC lobstermen will have VTS on their vessels. If for some reason, enforcement officers are concerned with the location or exchange of lobsters on the water, they now have a simple tool to determine the location of the vessels. Modern technology will make it easier to determine if there is any type of illegal transfer of lobster through the VTS.

The current distinctive regulations serve legitimate government, conservation, economical purposes because they are adapted to the various characteristics of the different LCMA's. The proposed change to the regulations will disproportionately negatively affect the OCC lobstermen. In fact, the only study relied upon by the ASMFC indicates the YOY stock in Massachusetts has increased in the past several years. The OCC regulations have allowed the outer cape lobstermen to responsibly fish mature, large, hard-shelled lobsters, and create a niche market, without any difficulty to enforcement.

¹ According to the study relied upon by ASMFC Massachusetts YOY is the only area with an increase in YOY in these years.

² ME 511; ME 512; ME 513(east); ME 513(west)

Page 3 April 8, 2023 OCC Letter to ASMFC

In conclusion, we are asking the ASMFC to keep the status quo and reject Addendum XXVII to Amendment 3. The changes proposed are arbitrary and capricious and serve no enforcement or conservation purpose. On behalf of the Outer Cape Cod Lobstermen, I am asking you keep the status quo.

Should you have any questions regarding this please feel free to call me at (508)717-0284.

With every best wish, I remain

Sincerely,

Christopher Markey

From:	Brendan Adams
To:	Comments
Cc:	Beth Casoni; Sarah Peake; Dana Pazolt; Sam Pickard; Jeff Souza; Steve Anderson; brockmamba@gmail.com;
	<u>ostohr03@gmail.com; jturner508@gmail.com; tyev1997@hotmail.com; tessa777@comcast.net;</u>
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	Evretriever@aol.com; mike_obrien27@yahoo.com; liquidwrench75@gmail.com; lobsterman16@hotmail.com;
	lobsterlife99@gmail.com; Christopher Markey
Subject:	[External] Public Comment For Addendum XXVII from Outer Cape Lobstermen"s Association
Date:	Saturday, April 8, 2023 9:38:20 AM

I am submitting this as public comment for the Outer Cape Lobstermen's Association. We represent the majority of the 46 OC state and 17 OC federal lobster permits. We restarted this organization due to our very serious concerns regarding the proposed ASMFC Addendum XXVII. Because of some of the business crushing options in addendum XXVII, the only option given that is reasonable to us is at this time is option A, status quo, for both issues. We already have a proven management plan here in the outer cape to protect our healthy lobster stock, and we have given up a lot to fish the way we do. Our management plan has worked very well and we want to stay with it unaltered. It appears to us that despite addendum XXVII being advertised as a conservation measure, it will in fact be a mechanism to push a standardization of rules and regulations as a matter of convenance to law enforcement. From the law enforcement aspect, they have a plethora of new tools at their disposal, such as 24 hours a day, 7 days a week, 365 days a year vessel tracking systems for all federally permitted lobster vessels which become mandatory as of May 1, 2023. Enforcement officers also have drones, AUVs, shore-based cameras, cell phone tracking data, and traditional methods, like at sea vessel boardings to enforce regulations. Education and training of our law enforcement officers for the different areas is crucial, as it would eliminate any and all gaps that could potentially be a problem, for a minimalistic budget and with our time constraints. Standardization of the lobster regulations for law enforcement should not be uniform, as different areas do not fish on the same biomass and some areas already have proven proactive management plans in place. Switching from enforcement to conservation, there was no actual data from OCLMA in addendum 27. The data that was used to create the figures involved in addendum 27 for the Outer Cape Cod Management Area was derived from LCMA 1 and from LCMA3. This data is not an accurate representation of the OCC and is extremely arbitrary. If there is no data for the Outer Cape, the prudent course of action would be to collect actual data for our zone. Do the trawl surveys even create an accurate representation of lobster stocks? The Outer Cape Lobster Management Area lands less than 7% of all lobsters landed in Massachusetts, including other pot/trap fisherman as well as federally permitted draggers fishing in federal waters the land in Massachusetts. Even though we have 100% reporting in Massachusetts, it is very vague to regulators what our percentage of large lobsters over the proposed 6 inch or 6 ³/₄ inch maximum gauge, and almost impossible to report the large number of v-notched lobsters under our current proved management plan in the outer Cape. Conservatively on the low end, we estimate a 25 percent or greater loss of landing and income if our current rules change. Given the astronomical cost-of-living difference between here, in the Outer Cape, and other areas lobstering off-cape as well as outside of Massachusetts, that potential 25% loss is critical for our small fleet to stay afloat. One prime example is the stark cost of living difference between Barnstable County and Coastal Maine. The difference in the cost of living between those two areas is astounding, with Barnstable County at the very least 36% more expensive, due to the lack of housing, as well as the lack of developmental land, which Maine has a vast abundance of. The 36% does not factor in many expenses, only the bare minimum. We do not have their option of driving inland and acquiring housing at a much

cheaper rate and commuting to the harbor. Our crewmen live here also, and we must pay them a living wage. Any addendum option, other than status quo, will put many of us out of business. If any other of the proposed options are chosen, each fisherman will lose tens of thousands of dollars, and the total loss of income for our local economy is immeasurable. This does not take into consideration the hundreds of thousands of dollars that each fisherman has invested into our businesses (permits only) that will be lost, by the devaluation of our permits as our catch will drop drastically, and by a huge reduction in our yearly income, forever. Our fisherman will lose not only their trucks and boats but their businesses, and then their homes here in Barnstable County if any option other status quo is chosen. We will have no other choice to leave Barnstable County and possibly even the Commonwealth of Massachusetts, we will no longer be able to afford the ever-rising cost of living. None of that is acceptable. Alternatively, at the same time the number of OCC permits will be consolidated into the hands of a few. Eventually overtime all of the permits will be owned by large investment corporations, which we unfortunately watched happen to groundfish and scallop fleet. This is not ok. Changing thousands of minimum gauges, i.e., the 3 ¹/₄ inch minimum to a larger size by a small amount would increase of 40% of the reproductive lobster population (at a minimum) and would be a meaningful and thoughtful conservation effort. That said, we recognize that all the lobstermen in the Commonwealth have given up a lot (time, permits, trap tags, etc) and should not be penalized by addendum 27 either. Changing a minuscule number of larger maximum gauges, the 46 permits without a maximum gauge, or our very defined vnotch definition would show no effect to our lobster resource. Why don't we have ventless trap surveys in the OCC? Why was the recent observer information on lobster boats in the Outer Cape not factored into this addendum? We as the Outer Cape Cod Management Area stakeholders need a lot more data before we can make an accurate decision of our area. We would be willing to work on that collaboratively as long as our heads are not on the chopping block. The Massachusetts Division of Marine Fisheries and ASMFC need to come up with real, hard data from OUR area before making life altering decisions for us, which we not only do not need but did not ask for. If Amendment XXVII is accepted with any option other than keeping the status quo, which hand would you like us to cut off? Under our current active management plan, our fisherman have willingly enacted a 10% trap tag tax when a permit or allocation is bought and sold, effectively taking 10% of the permitted tags out of the fishery forever. The OCC zone state has 46 permits, many of them fished by small boats and small crews. More than 50% of our zone still fishes singles, with an average of 393 tags per fisherman. OCC federal has 17 permits with an average of 559 tags per fisherman. Both state and federal Outer Cape Permits are below the industry standard 800 traps per permit in LCMA1. Our zone averages out at 476 trap tags per fisherman out of a combined 63 permits (down from over 100) and has nowhere near the impact on the fishery and the stock as the other larger areas. Under our adopted management plan, we used to be able to start fishing on March 15th, then it was pushed back to April 15th due to rising concerns with the right whales, now with a tentative start date of May 15th, with a strong possibility of our fishery not opening until June 1st. We have managed our zone accordingly, but we cannot give up anymore. We are not the problem. Our choice is to stay status quo. >

> Thank You,

>

> Brendan Adams

Outer Cape Lobstermen's Association President

From:	AFPhilbrook
To:	<u>Comments</u>
Subject:	[External] Draft Addendum XXVII
Date:	Saturday, March 4, 2023 11:56:24 AM

I am writing in support of implementing both issues described in the draft addendum. I believe standardizing and increasing the strictness of v-notch requirements across all LCMA's is an obvious move that will help the stock across the entire GOM. I am in full support of immediate implementation of the measure increase in LMA 1 and the decrease in LMA 3. I fish in LMA 1 and I fervently believe that this will not only increase the overall health of the stock but will also increase our overall poundage by increasing the average weight per lobster we harvest. It will also bring a higher quality product to market, thus fetching a higher price and providing more value to the marketplace.

My suggestion for implementation of the measure increase would be to change the size on January 1st and do 1/16 of an inch per year. This way we will see only a slight decrease in spring landings but will then make up the difference with an increase in fall landings.

Signed, Abraham Philbrook License #6792 LMA 1, Zone B Islesford, ME

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Abraham Philbrook 39 Woodward Heights Bar Harbor, ME 04609

From:	Andrew Taylor
To:	<u>Comments</u>
Subject:	[External] It is absolutely time for a tiered licensing system . And the whole state not eeds to be back on a level playing field as far as trap limits . The longer people have fished the more traps they should be able to have if they chose . Those
Date:	Tuesday, February 14, 2023 12:46:17 PM

Sent from my iPhone

It is absolute time for a tiered licensing system over everything else. And also the whole state needs to be on a level playing field. Zone e should not be 100 traps less than the rest of the state. Those who have fished the longest should be allowed the top number of a trap limit say 600, and those who were not fishing or did not cut back the last trap limits should only get 400, and any newcomers to the fishery should only get 300. And be capped at these numbers until a greater license is retired. This is only fair and may get guys to better accept a trap limit. Also with all the money being wasted there should be a permit buyback for a good amount of money. The more money paid for these permits the more people who would surrender them . This would all mean a huge reduction in end lines as well as a reduction in bait pressures and hopefully lower prices

April 8, 2023

Atlantic States Marine Fisheries Commission Attn. Caitlin Starks 1050 N Highland St. Suite 200A-N Arlington, VA 22201

Re: Lobster Draft Addendum XXVII

To Whom it May Concern:

I have been working on the deck of an Outer Cape lobster boat for as long as I can remember. From the elementary school years of wearing a life jacket on my Uncle's boat, to starting out on my own with a commercial student permit when I turned 12 and continuing with a regular commercial OCLMA permit before I ever had a driver's license, lobstering has shaped my life. My original OCLMA permit had a trap allocation of only 57 traps. Through many years and many hundreds of thousands of dollars, my current allocation is 511 traps, far below the standard 800 traps of an Area 1 permit for a substantially higher cost. This is my first Issue with the Draft addendum; it does not take our unique management plan for the Outer Cape that has created such a drastic increase on permit prices compared to other areas. I have personally invested everything I have into my permit and my business as a whole, so much that I cannot afford to buy a home in the current economy. I stand to lose everything I have built if the addendum is passed. This is incredibly disturbing as the addendum is backed by skewed data and is completely lacking Data from the Outer Cape management area. How can regulations for a lobster management area be made without data from that area? Furthermore, as a college graduate with a degree in marine biology and aquaculture from Roger Williams University, I was told that fisheries sciences is an estimated guess. This is incredibly concerning and upsetting when the "estimated guess" is being made without data from the OCLMA. In addition, at the public meeting in Massachusetts we were told by Massachusetts Department of Marine Fisheries director Dan McKiernan that the stock assessments that the Addendum is based off of are "not precise". "Estimated guesses" based off of stock assessments that are "not precise" are absolutely unacceptable as both a permit holder whose entire business is in jeopardy and as an individual with a scientific background. The methods of "conservation" are also unacceptable for a number of reasons, particularly because the scientific method only allows for one parameter in an experiment to be changed at a time however the addendum potentially calls for changes to V-notch definitions, minimum and maximum gauge sizes, escape vent sizes, and the number of duplicate trap tags issued. How will it be known which, if any management schemes are affecting the biomass? The simple answer is that there will be no way to tell. This addendum is simply throwing a can of paint at the wall and hoping it turns into the Mona Lisa, there is no rhyme or reason to it, no precision, no thought to the scientific method accepted and used worldwide. As cape lobsterman we account for only 7% of lobster landings in Massachusetts and rely heavily on large lobsters for our catch as well as v-notched lobsters with setal hairs. I build all of my own traps to fish primarily on these large lobsters and catch very few lobsters under 2 pounds. If a maximum gauge size is enacted for the Outer Cape

as well as the federal standard V-notch definition of 1/8 inch without setal hairs, I stand to lose 25% of my catch or more. That is unacceptable especially considering that I am fishing only 511 traps from May to December. I do not believe that anyone on the ASMFC board or any person in a blue-collar industry can afford to lose 25% of their yearly income, especially based on an addendum with so many flaws already listed. In addition, t multiple meetings, members of the OCLMA have been told that there is no settlement habitat in our area, so ventless trap surveys do not need to be conducted. To this aspect, I completely disagree as there are vast areas of cobbly bottom in our area that are ideal for settlement as well as the unique estuaries of Pleasant Bay and Nauset Inlet that act as nursery habitat for young lobsters. I do not appreciate being told that recruitment and recruitment habitat does not exist in our area because it is completely false. It is about time that fisheries scientists and managers start working more closely with the fishermen as our first-hand knowledge is completely invaluable. As fishermen, we are stewards of the resource, if the resource dies, so does our livelihoods. We want to protect it, we want to correctly manage the lobster stock, and the draft addendum is simply NOT the way to do this. As a management area, the Outer Cape proactively enacted a gear reduction, gauge increase, and fishing closures decades ago and many years before any whale related closures. Our management plan has been proven effective time and time again and as an area we would like to continue with it. We would also like to have increased data collection/research in our area since we are completely left out of the system. We are willing to help with this, especially with ventless trap surveys. However, as it stands, I feel that no action should be taken to Addendum XXVII and the current management measures should remain in effect for each management area (STATUS QUO).

Thank you for your time and consideration,

Benjamin Pickard F/V Dragon Lady OCLMA permit 004592 Box 1404 Wellfleet, MA 02667 Iobsterlife99@gmail.com

From:	WILLIAM G LACH
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Thursday, March 9, 2023 8:32:37 AM

Hi Caitlin. I have been lobersterin for about 45 years and have seen several dips in loberster populations over the years but the most recent drop is not one that I think is recoverable. The explosion of black sea bass populations can be correlated with the drop of small baby lobsters. About 8 years ago the sea bass population exploded in southern Massachusetts and as you know it takes about 8 years for a lobster to become legal size. This past year was the worst lobstering I have encounted in 45 years. I have caught many,many sea bass with baby lobsters in their stomach or hanging out of their throat. Since there are millions of these fish around now they will continue to feed on every baby lobster decimating the population where it will not recover. We continue to protect these feeding machines but will pay the consequences when they eat the ocean bare. I have a degree in Bio/Marine bio so I know how one species can affect others in an ecosystem. Is anyone looking at this thru the lens I am?

Thanks,

Bill Lach Westport Ma 508-254-7056

From:	Bob Bayer
To:	<u>Comments</u>
Cc:	JASON
Subject:	[External] comments on Addendum XXVII
Date:	Sunday, March 19, 2023 8:03:03 PM

1. The settlement index is likely flawed. if settlement i is measured n the same place year after year, settlement locations are likely to have changed due to elevated water temperature. With elevated surface water temperature the time from hatch to settlement is reduced. This means that the larvae and juveniles are probably settling in other areas than in the past. In addition, feed type and availability may have changed from increased water temperature. Drop in abundance may not be related to egg production, rather feed availability.

2. Elevated water temps mean that lobsters become sexually mature at a smaller size and younger age. If this is the case, then there is no point in increasing the gauge. Fishermen I have talked with indicate that they are seeing an increase in the number of short lobsters with eggs. It would be appropriate to do a fishermen's survey of egged shorts prior to increasing the measure.

3. There needs to be another way of assessment rather than settlement. Something like a juvenile trap might be a better option.

4. It's time to be optimizing hatcheries. We don't need them now, but if and when we do need them we are ready.

5. It wasn't that long ago the Maine lobster harvest was 20 million pounds annually.

Bob Bayer Professor Emeritus of Animal and Veterinary Sciences Emeritus Director, Lobster Institute UMaine <u>rbayer@maine.edu</u> ARS W1TNH

From:	Bob Bayer
To:	Comments; JASON
Subject:	[External] dropping the gauge on larger lobster
Date:	Monday, March 20, 2023 12:12:18 PM

Large lobsters produce 2 sets of eggs on one mating so that a single 4-5 inch carapace lobster produces the same number of eggs as 20 1.5 pound lobster.

I don't remember the exact number, but the study was done by Susan Waddy in Canada.. Someone should look it up. Decreasing the minimum size make sense to me...

Bob Bayer Professor Emeritus of Animal and Veterinary Sciences Emeritus Director, Lobster Institute UMaine <u>rbayer@maine.edu</u> ARS W1TNH

From:	Brendan Adams
To:	<u>Comments</u>
Cc:	Christopher Markey; Sam Pickard; Beth Casoni; Sarah Peake
Subject:	[External] Lobster Draft Addendum Addendum XXVII Public Comment
Date:	Saturday, April 8, 2023 11:27:37 PM

My name is Brendan Adams, I fish in the Outer Cape Cod area. This is my personal public comment for lobster draft addendum XXVII. I submitted a comment earlier today on behalf of the Outer Cape Lobstermen's Association. I am going to try and keep this fairly short. Concerning all issues related to this draft addendum, I have no choice other than to say that we stay status quo. You have been told by the majority of the stakeholders that we all want status quo on this. I really hope that you take that into account. Why are we trying to fix something that isn't even broken? It makes no sense to me why we are trying to tinker with this, and the timing seems suspicious. Frankly, it really appears that this is trying to be pushed through in the dark of the night. We were not even going to get an in person meeting here in Massachusetts until people complained about it. So the asmfc was going to take public comment on a webinar, I am pretty sure that isn't kosher, from a legal stand point. The "science", if you can call it that, for the area that I fish (OCC) is an poorly crafted fairy tale at best. By extrapolating a couple areas that we abut some one did some voodoo styled math, and came up with something that is much less than best available science. Not cool. The big picture here is that an convenance for enforcement is being pushed down our throats by calling for conservation methodology. I watched the January meeting concerning this addendum, and we all know who and why this is really being pushed. This appears to be purely political. That isn't ok either, if it is even legal. Maybe instead of trying to divide us and concur, you all should have realized that we were all in this together. I think the most pressing issues to the lobster fishery are whales, wind, and industrial aquaculture. Let's not forget the people trying to push hopeless fishing gear (pop ups) on us. Spell check misspelled that, but it seems astute. All the people testing pop up gear and saying it works well are getting paid to say it works. You read between the lines and figure that out for your selves. As far as putting our lobster fishery for the whole east coast into a slot limit, the Canadians will take over parts of our market, both domestic and globally. They also will keep the lobsters we have to release, large and small. They are not going to change their fishing rules for us. Thinking that their lobsters will not make their way to our markets is also a fairy tale. Those lobsters we would be forced to throw over are not going to be crawling off into the sunrise to enjoy their golden years, they are going to end up in a cooker one way or another. Why don't you all just leave Massachusetts alone on this issue. All we do is give up time, and traps, and permits, and we never get anything back. In reality we have already done our parts conservation wise, above and beyond. We cannot give up anymore. Lets stay status quo. The management plan in our (OC) area is working just fine, please don't mess with it.

Thank You,

Brendan Adams

3/30/2023

Caitlin Starks Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200A-N Arlington. VA 22201

My name is Chad Mahoney. I have federal and state lobster permit I fish in area 1 my home port is in Hull, MA. I attended the March 29 meeting with the State and MLA. I would like to keep things the way it is for now and do more research to get more answers on how the stock looks.

Regards,

Chad Mahoney 887 Nantasket Ave Hull, MA 02045



Hello,

My concerns for trawl "surveys", is that otter trawl is slightly complicated and wildly different results will come from different people in charge. I spent many years on boats doing otter trawling and I've seen every mistake there is.

Lobster data needs to come from current lobster fishermen fishing traps in a controlled way, to get reliable data.

I heard someone say there are differences year to year with how many small lobsters are in traps hauled during sea sample trips, which I have participated with in the past, I can tell you there is a big difference there depending on the bait you use.

Herring = more small lobsters, pogies without bag = many less small lobsters.

Another thing is there are many more groundfish (hake, cod) showing up around where most of the lobstering occurs, that will most definitely affect lobsters, especially ones discarded while hauling traps, drifting back to the bottom again without cover.

I can tell you without a doubt, that any changes to the measure will not fix whichever problem is happening, if it is indeed a problem which I doubt. I do not see any issues. I started lobster fishing in 1989.

Bay fishing may be (but almost certainly) affected by all the poisonous lawn/weed treatments that these "new people from away" use to make their lawns beautiful, at the expense of the environment. Most have no idea what they are doing. A whole isle dedicated to toxic chemicals are available at Lowe's and Home Depot. That should not be allowed and this will be realized way too late in my opinion.

Thanks

Chip Johnson C W Johnson Inc 25 Edgewater Colony Rd Harpswell, ME 04079 207-833-6443 www.cwjohnsoninc.com April 8, 2023

Atlantic States Marine Fisheries Commission Attn: Caitlin Starks

1050 N. Highland St. Suite 200A-N Arlington, VA 22201

Re: Lobster Draft Addendum XXVII To Whom It May Concern:

Thank you for the opportunity to comment on Lobster Draft Addendum XXVII. I christopher Pickard am a commercial lobsterman from area OCC and have been fishing there for 10 years. As it currently stands there is no data for area OCC. I feel that there should be no action taken to Addendum XXVII, and the current management measures should remain in effect for each LCMA at final approval of the addendum.

The area that I fish has had its Management plan so that we are proactive about taking care of or stock

Bottom line we need more research in our area before life crippling discussions are made

Thank you for your time, Christopher pickard Box 622 Wellfleet, MA 02667 <u>pickardc508@gmail.com</u> F\V Playtpus Lision number 005070

From:	collamoreclinton@gmail.com
То:	Comments; Clint Collamore; Rhonda Conway; PATRICE MCCARRON
Subject:	[External] RN
Date:	Sunday, March 5, 2023 8:09:27 AM

Good morning. Does anyone take into account that because of last year lobster prices, bait shortages, and fuel costs figures in to all of this? Lobstermen set out late, if they did at all, and a lot took up very early. This should play a significant role in the "Real Numbers." I hope someone addresses my comments before they just go off and implement something else that may not be needed yet. I have been around the water since 1969 and trying to follow all of this stuff. It has got so ridiculous. I feel very sad for future generations trying to survive the industry. Between politics and everything else, we are not leaving them in very good shape. Shame on us. Thank you.

Clint Collamore Waldoboro,Me.

Sent from Mail for Windows

From:	dan feeney
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Friday, March 17, 2023 1:46:07 PM

Wow you are actually going to standardize your regulations on lobster sizes and pot escapements. I wonder why common sense didn't arise till now. After all you have changed the sizes for everything over the years to the financial detriment of fishermen all across the boards. I applaud the effort but am very surprised that it might happen.

I suggest that you add one more regulation that would end the arguments for all time.

"From now on the expenses involved with regulatory changes to fishermen's lobster gear shall be born entirely by the fisheries managers and regulators salaries budget, without exception nor shall that budget be increased to subsidize any losses"

What cha think?

Sent from my iPhone

From:	dan morris
To:	<u>Comments</u>
Subject:	[External] Draft Addendum XXVII
Date:	Wednesday, February 15, 2023 12:05:55 PM

While I don't believe there is a need to increase the gauge for lobsters off the coast of Maine right now, I do understand that having a trigger mechanism might be helpful down the road. The drawback to them is that circumstances/environmental conditions can be so variable that a trigger, deemed a reliable indicator of population health now, might not be reliable in the future. However, if such a mechanism is enacted, I would suggest that the conditions that tripped the trigger be present for several years before taking any action. Having the conditions present for several years ensures that a knee-jerk reaction isn't undertaken with new regulations. No two years are alike generally speaking, and any perceived drop in young-of-the-year lobsters only means that the areas tested dropped, and not necessarily other, yet-to-be discovered, areas due to changing environmental conditions. Of course, we can wait for a corresponding drop in catch, which has been predicted many times, but hasn't happened to date. Waiting also puts any regulation 6 years behind the need for it.

Having said the above, an increase in the vent size alone is, in fact, a gauge increase, in reality. It would be less work in my opinion for everyone involved and is easily enforced. It also reduces the amount of lobsters being handled/measured/stressed each day.

Phone: (207) 542-7657 Fax: (314) 237-2590 Email: dan@chsawyer.com

3/13/23

Caitlin Starks Senior FMP Coordinator 1050 N. Highland Street Suite 200 A-N Arlington, Virginia 22201

Good Morning,

I would like to submit a public comment to the commission concerning the Lobster Draft Addendum XXVII.

Our company has been a manufacturer of hand tools for the commercial fishing industry since its founding in 1992. We are currently a major supplier of lobster measuring gauges for all of the LCMA's which would be affected by the changes in minimum/ maximum size regulations proposed within the Draft Addendum. Our primary concern is with the implementation schedule for any changes in these regulations which could have an undesired negative economic impact on the manufacturers, suppliers and end – users (lobster fishermen, cooperatives and law enforcement agencies).

Consideration should be given as to the time between the date of notice of the change in regulation to the date the new regulation would take effect to allow an adequate time frame within the industry for the manufacture and distribution of necessary equipment and hardware in the supply chain. All members of the supply chain have an interest in avoiding the waste of resources when parts and equipment must be discarded due to obsolescence rather than replacement due to typical wear, etc.

From my understanding, under the current plan of action for implementation of most of the options available on the draft addendum, the new regulations would automatically take effect as the result of review by the ASMFC of lobster survey data in November each year if the appropriate trigger level indicated by the survey data was reached. The Commission would then notify the public and state agencies and the new regulations would take effect on the opening day of the following lobster season, May 1 of the following year. This would allow only 5 months for the industry to adjust for compliance with the new regulations. Also, as was mentioned at the hearing in Freeport, Maine, March 7 2023, states would be allowed to decide on their own regulations, provided that it would be the same standard or a more conservative standard of measures. Each state's process of passage and implementation of new regulations could shorten the time the industry would have to adjust even further, increasing the chance of a negative impact.

I propose that, for any of the proposed lobster size regulation changes, the date of implementation and compliance to the new regulations be not less than 12 months from the date the new regulations have been published by each state in order to avoid waste and to allow for the additional time needed for the states to pass and implement new laws and also permit a feasible time frame for industry supply chain and fishermen the time needed to change their gear for compliance.

> Respectfully, Daniel Sawyer, Owner C. H. Sawyer & Son LLC

C. H. Sawyer & Son, LLC 657 Eastern Road Warren, ME 04864 Phone: (207) 542-7657 Fax: (314) 237-2590 Email: dan@chsawyer.com

From:	Dana and Peggy Tracy
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Wednesday, March 8, 2023 6:34:44 AM

I would like to submit my comments to the proposed addendum XXVII to be considered from a 'hands on' point of view. I will be entering my 50th year as a fulltime commercial lobster harvester from the State of Maine. I have seen ups, downs, measure increases, vent changes, market fluctuations, lobsters changing their areas, and much more.

The last measure change that took place was presented as a necessary step to protect the industry. It was thought that it would nearly double the marketable lobsters to be caught and increase the per pound value. While that may have proven to be close to becoming fact the real fact is that it hurt the market for several years. Consumers now had to pay for a heavier lobster and there was a long period of adjustment to the increased price. Another increase in measure would surely have the same effect and with the increased operating expense it will be another market adjustment which will ultimately fall on the harvesters' shoulders with increased price and lower demand.

In reading the Addendum in regard to stock assessment I am very skeptical. Though I am not coming at it from a scientific point of view I have seen for 50 years what the stock is doing. The trawl surveys and ventless trap surveys never took into account the lobsters changing their habitat. I have fished around ventless traps and they are putting some where there are few lobsters at that time. An example is setting the trap on a hard

piece of bottom when the lobsters are all around it on the soft bottom. Years ago they might be on that bottom a little more but that has changed over the last decade. Again, the trawl surveys are done in the same places year after year and things have changed, of course the observations are lower--they have moved!

I am addressing this from a fisherman from Maine and it is my opinion that the Maine stock is healthy and any changes to the measure will be detrimental to not only the fishermen but the lobster stock. I base this on the fact that there is an abundance of lobsters on bottom and fear that this addendum could lead to overpopulation. There are days when my catch is about 30% of seed lobsters and many of them are very small. They are seeding out at a smaller size than I have ever seen. We can call it warming waters, increased population or what ever you want but the best thing you could do is use observers to get the best 'hands on' assessment of the industry rather than hypothesize about what might be.

In closing I would like to thank you for the time to comment and hope you will consider my years in the industry as valuable information. There may be steps to take that will bring the states in closer alignment so markets can better work but measure increases in Maine is not the answer.



Virus-free.<u>www.avast.com</u>

From:	Dillon Reed
To:	Comments
Subject:	[External] Lobster Addendum XXVII
Date:	Monday, March 20, 2023 5:39:01 PM

Hello,

My name is Dillon Reed, I am a lobsterman from Friendship, Maine. I think increasing the measure and vents sizes right now would be another vital blow to our industry right now. Last year alone with the price per pound decrease and increase of fuel and bait was a very hard year for almost all of us especially the up inside guys. I feel like there is tons of lobsters around big and small and a decrease in catch could be related to the profit margin for 2022 where no one wanted to go work extra hard for nothing. I jus feel like we should make sure we know what else is going to happen with whale rules and windmills before we do a huge change like a measure increase which would hurt everyone even more so. This whole industry seems to be on edge at the moment I just can't see why to add more changes in regulations could help at all. I am sole supporter of my household of wife and two kids. I would like to be able to continue to lobster and actually make something at it. I hope there is a future for lobstering and it's not going down the drain. I've committed my life to this already and I know most other fisherman are in the same boat and there's not many other options for us. Just please consider what these changes would effect on top of the worry we are already having.

Thank you, Dillon

Sent from my iPhone

April 8, 2023

Donna Pickard Massachusetts Lobster Permit # 000870

To whom it may concern, I am writing in opposition to Amendment XXVII to the lobster fisher in Massachusetts. I currently am proud to hold an Outer Cape Lobster Permit, one of 46 left in the state. I have been fortunate enough to fish with all three of my children and now fish regularly with my eldest grandson. At 81 years young, I am the oldest active member in the Outer Cape lobster industry. If the proposed amendment is passed, I will lose 25-30% of my catch, which is my primary source of income. I am disgusted with the ASMFC as well as MADMF for trying to steamroll new regulations for our zone, without any data to represent us, especially when our zone only accounts for 7% of lobsters in Massachusetts and less than 1% on the east coast. The lobsters that we do catch are primarily large lobsters 8+ pounds, and are highly converted overseas, not only due to their large size, but their heartiness in long distance shipping. Our lobster stock is highly migratory in the Outer Cape, which would be the best area for data collection to have an accurate representation of the lobster stock as the lobsters are coming from Georges Bank, Southern New England and The Gulf of Maine. At this time, due to lack of data, the only option for the Outer Cape is Status Quo, A in the Amendment 27. With more accurate research and data, only then can we make changes that will ultimately decide the fate of the citizens here in the outer cape.

Once again, I choose Option A, Status Quo, and I hope with a sound mind you do too. Thank You, Donna Pickard

From:	doug maxfield
To:	<u>Comments</u>
Subject:	[External] Status quo
Date:	Wednesday, March 15, 2023 9:25:25 PM

Doug Maxfield, area 1 fisherman. In response to tonights webinar I would like to go on record as supporting option a status quo across the board.

From:	<u>elf090971</u>
To:	<u>Comments</u>
Subject:	[External] Lobster gauge increase
Date:	Sunday, March 26, 2023 10:24:29 PM

Hi ,my name is Ed Ferent.

This proposed gauge increase will absolutely destroy the lives of the lobstermen, their families, employees and the businesses that they help bring revenue to.

We have already contributed heavily to the preservation of the industry with a larger minimum gauge ,a smaller maximum gauge, mandatory V- notching, larger vents in traps, biodegradable vents, trap limits and as of the last several years a shortened lobster season because of right whale regulations to protect their species.

These are not the only factors that have helped with conservation of the industry. We also have the price of fuel, price of bait and the availability of bait. These three factors have forced lobstermen to not go out as often as they can because it is just not economically feasible and causes fewer lobsters to be landed.

We must take all of these factors into consideration, for if we don't, we will be acting maliciously without basis in order to just regulate an industry because you can.

I ask you to do the right thing by not increasing the lobster gauge size in any way. This will help to preserve the lobstermen and their families to survive the harsh times that our industry is feeling from all sides.

I implore you to do the right thing! It will be the best for all who would be impacted.

Thank you very much for your time and the chance to voice my concern!

Ed Ferent F/V Sandi Boston,MA

From:	gary hatch
To:	<u>Comments</u>
Subject:	[External] Lobster Addendum xxvll
Date:	Saturday, March 11, 2023 10:30:26 AM
Importance:	High

Dear Sir's; In response to your written conveyance to managing the Gulf of Me ,GB Lobster fisheries. As in so many Of the ASMF councils actions, I find it seriously flawed !!

First I believe that you need to address the western New England fishery's

problems, as now its spilling over into the Gulf of Maine fishery!! Many of the displaced fishing industry are coming to the Gulf of Me and GB fishery to maintain a viable business.

As for your written response to the fishery, as so many Council responses to management you circumvent the real problems and push your lack of sound science onto a viable fishery to promote your governmental powers!!

First to your Addendum, This proposal not only will have a negative effect to the Near shore fishery as all it's really doing is sustaining the area three fishery that will be the benefactors of this action. The inshore fishery will not only be negatively affected by a lowered biomass to produce, as well a negative effect to overall pricing!!

On the other side the area three fishery will benefit by increasing their biomass for that fishery at the time of input of the size class into the fishery.

If you feel that your need to disrupt the inshore fishery is necessary, It would be inparitive that you make the same equal adjustment to area three fishery to circum vent this injustice. I feel you need to take all factors into account at this time to support any action??

The most evident factor would be the 50% reduction in landings this past year, This factor had nothing to do with the biomass, but with marketing and the overwhelming expense to harvest the product.

As evident with the amount of Lobster businesses for sale at this time do to the false narrative being placed on the fishery along with the degradation of our free enterprise system,

I sincerely hope that you take no action on this {GOM<<GB} fishery and promote the nessary factors to rebuild the western New England Fisheries with you time and efforts!!

Sincerely Gary Hatch Ghatch2002@roadrunner.com

Sent from Mail for Windows

From:	<u>hugh bowen</u>
To:	<u>Comments</u>
Subject:	[External] Addendum xxvii comments
Date:	Friday, March 10, 2023 5:41:45 PM

Using the management options cheat sheet, under "issue one 1", I am for all sub options under option B except for sub option B one, I think the maximum gauge should be smaller, 6 1/4 inches.

"Issue two", option B, I would vote for option one, 32% decline trigger. Under the management measures options, I would choose option two.

Sent from my iPhone

From:	Jacob Thompson
To:	Comments
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Friday, March 31, 2023 9:31:50 PM

I think you should eliminate lobsters to be taken by draggers and divers as a first step. Then make everyone have the same

v- notch rules then the same size measure on both the big and the small sizes including Canada.

Thanks Jacob Thompson Vinalhaven Maine

Sent from my iPhone

From:	James Robbins
To:	<u>Comments</u>
Subject:	[External]
Date:	Wednesday, February 15, 2023 6:32:50 AM

I strongly suggest cutting the trap limit in half. The lobster fishery is being way over fished

From:	James Robbins
To:	<u>Comments</u>
Subject:	[External]
Date:	Monday, March 6, 2023 1:45:53 PM

Instead of increasing vent size or gauge size just cut the trap limit in half . The lobster fishery is being way over fished

From:	Jason Hyora
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Saturday, April 1, 2023 9:18:12 AM

Good day, this is Jason Hyora. I've been lobstering out of Chatham MA full time since 1989.I've seen a lot change in this amount of time, and we (all lobstermen) have changed and adapted to all the regs (mostly right whale related). Which most all of these regs have been expensive to switch over to and put alot of pressure upon our industry.

So, to address the latest proposals on gauge sizes, v notched lobsters, law enforcement ect.,my view and my stance is to leave things STATUS QUO!!!!! We have endured enough change and pressures from the powers that be, and are at a point in our industry where we can't afford in any way to lose even more profit due to rule changes!!!! Thank you for your consideration.! Best, Jason Hyora

From:	Jason Hyora
To:	Comments
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Saturday, April 1, 2023 10:53:35 AM

Hello again, I, Jason Hyora have just submitted comments but I failed to add a few things in, so I'm emailing you again.

On the topic of enforcement being the same in all states involved, that is preposterous! It appears to me that lack of training is the root cause of concern amongst the EPO community. A point that nobody will dispute, that I know of. To implement this part of the addendum is plainly irresponsible.

Hyora:Chatham lobsterman.

From:	swansislandcharters@gmail.com
To:	<u>Comments</u>
Subject:	[External] lobster ammendment
Date:	Wednesday, March 8, 2023 5:16:33 PM

1.) I am opposed to allowing Canadian undersized lobsters into the United States if the small guage is increased. That will hurt our price at a time we will see lower landings.

2.) I would suggest basing the trigger upon a 10 year average that continues to move ahead each year.

3.) I would lower the large measure end rather than looking at increasing the small measure to increase recruitment if data is considered necessary.

4.) Lastly I would like to see ASMFC oppose offshore wind development on behalf of the lobster resource. From physical damage to lobsters at all age stages to damage of habitat, there is nothing good in offshore wind for the lobster resource.

Thank you, jason

Capt. Jason Joyce Swan's Island Selectman Registered Maine Guide CG Licensed Master 100 gross tons Authorized Commercial Assistance Towing F/V Andanamra M/V DEFENDER 207-479-6490 www.swansislandcharters.com https://www.youtube.com/channel/UCuOwmhDMi5Ac0dGnDwOmgRg

From:	swansislandcharters@gmail.com
To:	Caitlin Starks; Comments
Subject:	RE: [External] lobster ammendment
Date:	Friday, March 10, 2023 11:26:32 PM

Hi there,

Thank you for the opportunity to weigh in with additional comments on Addendum 27.

1.) Has the beneficial impact of implementing Zero tolerance in all federally managed areas for v-notched lobsters been considered. No exceptions, following Maine State waters definition of zero tolerance would provide more protected seeders and likely exceed the estimated recruitment projections of raising the small measure in Area 1.

2.) Is there a trigger mechanism that returns the small measure increase in Area 1 to the previous size of 3 1/4" if eventual trap reductions are implemented in the future? Trap reductions, if implemented will have a positive effect on the population and negate the need for the small Guage increase in my opinion.

Thank you, jason

Capt. Jason Joyce Swan's Island Selectman Registered Maine Guide CG Licensed Master 100 gross tons Authorized Commercial Assistance Towing F/V Andanamra M/V DEFENDER 207-479-6490 www.swansislandcharters.com https://www.youtube.com/channel/UCuOwmhDMi5Ac0dGnDwOmgRg

From:	jay
To:	<u>Comments</u>
Subject:	[External] Lobster Massachusetts
Date:	Sunday, March 12, 2023 1:18:43 AM

I use mackerel for bait but the new regulations make it impossible to bait my traps. With only 20 mackerel allowed on the boat. This isn't fair for someone that spends 80 in fuel to catch some Lobster for My family and now have to bait lightly. If you have a Lobster permit you should be allowed more mackerel on the boat just like a boat for hire.

Thank you Jason Romans 508-294-3862 cell

Sent from Yahoo Mail on Android

Jeff Putnam

107 Littlefield rd Chebeague Island Maine, 04017

April 2, 2023

Atlantic States Marine Fisheries Commission,

Thank you for putting together a very detailed package about addendum 27. I have reviewed it carefully, please consider my comments in your decision making process.

For many years now the Maine Department of Marine Resources has held meetings to notify us of the decline in settlement they are seeing through the ventless trap program and trawl surveys. I understand that while our catch numbers in GOM have remained high, it is concerning that the SNE stock decline started with reduced settlement numbers. I am in support of developing a strategy to protect the spawning stock biomass and put in place consistent conservation measures across the GOM/GBK harvesting range. Maine Lobstermen have a history of being proactive in protecting this resource. I have benefited from the older generations sustainability measures and it has always been my hope that the generations behind me will benefit from my attempts to keep the resource resilient. However I also believe that ASMFC has not given an option that goes far enough to protect V notch lobsters across the range of areas, nor has ASMFC been vocal enough in opposition during the large whale take reduction process to proposals that would cripple our industry and make drastic changes to the harvest levels. Therefore, my comments are in support of some of the measures that are proposed in addendum 27 but with stricter v notch retention restrictions and a sunset clause.

Consistency of a conservation strategy is mentioned several times. Maine has led the way in the US and Canada to protect spawning females for multiple sheds with our zero tolerance V notch definition. If ASMFC truly wants to protect SSB, the resiliency addendum objective would include Maines zero tolerance for V notch possession across all management areas. Issue 1 calls for standardization of measures, ASMFC should standardize the V notch limit to meet Maines zero tolerance. Sub option B1 recommends standardizing V notching to the most conservative measure, but then should state that the most conservative measure is zero V notch, zero mutilation. Section 2.5 says "loss of conservation benefits occur when lobsters are protected in one area but can be harvested in another". That is the statement in the document that makes the argument in favor of standardizing the zero tolerance for V notch across the areas. I understand that this is politically challenging for ASMFC to propose, but LMA1 is being asked to give up, by all accounts, the biggest amount of volume to support the resource at least during the beginning of these measures. This would be a huge decrease in landings in LMA1 for a period of time, other areas should also shoulder the burden for the greater good of the resource. I only support a sub option that incorporates zero tolerance for V notch because the purpose of this addendum is to protect the SSB. I also would support sub option B2 mandatory V notching.

If zero tolerance for V notch possession is put into place across the GOM/GBK harvest area, then I would support a minimum measure increase. I agree that the settlement indices are

concerning and I understand that most of the catch in LMA1 is within one molt of minimum legal size, so increasing that minimum size would allow for more opportunity to increase the SSB. Under issue 2, I would support option C, to have the changes occur shortly after this addendum is passed. The only change I would make would be to increase the minimum size to 3 3/8 in step 1, no later than 2026. I believe a two step gauge increase will be less beneficial and cause more confusion and potentially enforcement issues.

I want to make clear that I feel a sunset clause for these measures is vitally important. The ASMFC has to look at the big picture of the lobster industry which includes the potential for NMFS to implement massive changes to trap limits and area closures no later than December 31 2028. LMA 1 and 3 fisherman, fishery groups and State Government Departments worked to fend off a crushing blow brought by NMFS based on a false premise of our fishery harming large whales. To the best of my knowledge ASMFC, which has a charter to protect fisheries, did not step up to support keeping the status quo of a lobstering industry during these discussions. The GOM/GBK stock assessment points out that at current fishing levels the exploitation rates are below target, the stock is stable, and over fishing is not occurring. The harvesters and shore based businesses that depend on lobstering need every group to speak against the draconian measures that NMFS has indicated are needed to meet a a false risk percentage. ASMFC should commit to oppose trap reductions or closures that are not put forward by industry itself. This is the reason that I feel a sunset clause is important. If by December 2028, we are forced into trap reductions or have huge closures in LMA 1 and 3, that would most likely decrease the exploitation rates which in turn would increase the baseline spawning stock biomass and increase juvenile lobsters. In effect the current indices and the after-2028 indices would be comparing apples to oranges making the data used in addendum 27 obsolete. The combination of a gauge increase and trap reductions/closures would be unnecessary.

In summary, if zero tolerance V notch and a Dec 31 2028 sunset clause is incorporated in addendum 27, I would support:

Issue 1 option B sub options B1, B2, B3 at zero tolerance, and B4.

Issue 2 option C, preferably with a single step increase to 3 3/8 as soon as possible.

Sincerely yours,

Jeff Put

Jeff Putnam

Issue number one Vnotch definition. Status Quoe. If he 1/8 inch v-notch definition is standardized it needs to state that any V shaped notch coming to a point with or without setal hairs deeper than 1/8 inch. Without having the definition of a V shaped notch coming to a point (which is a true definition) any nick in the tail deeper than an 1/8 inch could be considered illegal by some and legal by others. Without having a true definition it would be impossible to enforce since it would be so subjective from officer to officer and fisherman to fisherman. If no specific definition is in place it becomes zero tolerance for any nick. A true 1/8 inch v-notch cut with a v-notch tool will last 2 molts. If v-notch was the solution then the population would not be in a decline according to the asmfc, v-notching has been going on for over 40 years since the 1978. The 47 state licenses in the OCC with their v-notch rule are not the cause of the depletion of SSB. The 5600 licenses in area 1 with their v notch definition is obviously not the solution to the SSB proven because 40 years later and the SSB is not well.

Issue number 2, Status Quo. If an option was picked I would suggest option E before it was amended by the representative from Maine. Option E was proposed due to the fact that it would have the highest positive impact in the SSB. The representative from Maine then amended option E to put a maximum gauge on OCC and lessen the maximum gauge in area3. This just proves that this is not all about the stock management but more because of a vendetta that Maine has for OCC and our management plan. OCC has a very fluid management plan that has been adhered to. There were trap reductions when it was implemented and is ever changing with a 10% trap reductions every time trap allocations get transferred. There are 47 OCC state licenses averaging 370 traps per license, that is half the allocations of every license in area 1 with roughly 5600 licenses with 800 allocations. OCC and area 3 management plans have changed over the years with trap reductions, and area 1 has had no changes in their traps and management plans since the plan was adopted.

In 1978 the Northeast Marine Fisheries Board had a comprehensive study and plan for lobster management where they stated the same as this addendum does, that the 3 ¼ minimum area 1 has takes lobsters smaller than they have a change to reproduce. The science obviously has not changed in the over 40 years from the 1978 document since the this addendum states that same. The 1978 plan wanted to get all minimum gauges to 3 ½ with a 6 step gauge increase. Area 1 stopped at the first increase and OCC stopped at the 3rd increase. Table 3 on page 59 of the Addendum shows that and area one minimum gauge increase to 3 3/8 would have a 38% increase on the SSB. Just Maine last year in 2022 lists that they landed 97,956,667lbs of lobsters. A 38% increase would be roughly 37,223,533. Table 11 on page 64 shows if OCC has a 6 inch maximum gauge it would be maximum an 8% increase. The OCC estimated to have landed less than a million lbs. 1,000,000 times 8% increase would be 80,000. A minimum gauge increase to area 1 would have a 465% positive increase in the SSB over the maximum gauge on the 47 state OCC licenses.

In any study you need to change the thing with the biggest impact in the direction you want which would be a minimum gauge increase for area 1. If you change the vnotch, minimum and maximum gauges there will be no way to see how each change has on the SSB over the next 5 plus years. You need to change one thing at a time and see how it effects the stock so that in the future if

further measures are needed for the stock you will know what has the greatest impact to increase the SSB.

Cost of living on Cape cod is 40% higher than that of Maine. There is no option to live an hr inland to fish the OCC. With the trap reductions most of us have spend hundreds of thousands of dollars to up our allocations compared the price of an area one license of roughly 20-40 thousand dollars. The change in the management plan that OCC had picked and have stuck with will devalue our licenses considerably which most of us have our houses up against.

There has to be better studies on YOY with sampling in different areas as before. Water temp is ever changing and they most likely have moved to a different area than the sampling. You need ventless trap studies including some in OCC and the east part of Cape cod bay. Food sources and water temp for the YOY larva change every year and should also be recorded at each testing site to see what environment they are now abundant in.

No lobstermen wants to see the stock collapse since it is our Lively hoods in jeopardy. But there has to be science to back up the changes and not political reasons such as the change to option E from the Maine representative.

-Jeff Souza

Massachusetts OCC state license 4th generation

From:	jer lop
To:	<u>Comments</u>
Subject:	[External] lobster draft addendum XXVII
Date:	Saturday, April 8, 2023 9:56:53 PM

ASMFC, MA DMF,

I am submitting a comment as a member of the Outer Cape Lobstermans Association.

In full support of the comments you already received by President Brendan Adams and Vice President Sam Pickard, and myself on the webinar, status quo is the only option for lobster management area OCC until more studys are done.

On a personal note,

My permit has surrendered approximately 85 OCC trap tags from tag transfers to get to my final allocation of 800. Also the federal permit that was once attached to my license had to be surrendered in order to obtain the greater tag allocation due to the tag transfer restrictions. I have invested approximately \$1 million USD for my business which is currently thriving. Not by choice, but as i stated this is a STATE only permit. New proposed changes would cut my value in half. I would like a federal permit again to help cope with these changes if they are forced upon us. I will take a crippling blow under any unjustified changes that are represented by false and inaccurate data not done directly in the OCC management area.

More studys and data need to be gathered from area OCC. I have been in this management area my whole life and as a steward of the sea, i am very happy with its great condition.

Status Quo for more OCC Data

thank you, Jeremy Loparto

From:	<u>G2W2</u>
To:	<u>Comments</u>
Subject:	FW: [External] Lobster public feed back
Date:	Monday, March 13, 2023 1:56:36 PM

From: jimurphy2@verizon.net <jimurphy2@verizon.net>
Sent: Thursday, March 9, 2023 8:38 PM
To: G2W2 <G2W2@asmfc.org>
Subject: [External] Lobster public feed back

Hello: Excellent presentation tonight. I was not quick enough to copy the email address to add public comments on. Can I do it here? I just have two or three things to add.

1. We all just want to have a level playing field. If the Canadians are not placing a restriction on size of their catch it hurts us.

2. I Agree with increasing the catch size if this will reduce the stress on out stock and increasing the chances of producing more young.

3 Are there any studies regarding the overall health of our lobsters?

Jim

Sent from AOL on Android

From:	lobstahman8@gmail.com
To:	<u>Comments</u>
Subject:	[External] Status quo
Date:	Wednesday, March 15, 2023 8:58:43 PM

Joe Edelstein area 1 out of Gloucester I agree with Mike Goodwin, Steve Budrow let's not go backwards I'm status quo Sent from my iPhone Hello,

My name is John Drouin. I am from Cutler Maine. I have been a full time lobster fisherman since 1979.

I am Chair of the Maine Lobster Zone Council for zone A. I occupy a seat on the Maine DMR Lobster Advisory Council.

I will start by saying I am AGAINST any gauge increase or vent increase for LMA 1. I do believe it would be overwhelmingly helpful to decrease the maximum size in LMA 3 and to establish a oversize measure in the OCC. And a standard definition of a V-notch. Protection of these bigger lobsters are what Maine has for generations declared to be the most important part of the brood stock! It has made zero sense all these years to protect these lobsters, which again, are the cornerstone of the brood stock, just to be caught and sent to market by someone else.

Now I would like for you to think about the current statements that are being said from the industry as well from the regulatory bodies in Maine. We all say that Maine has the most sustainable fishery in the world!!

Again, MAINE HAS THE MOST SUSTAINABLE FISHERY IN THE WORLD!

So, if we are so sustainable, doesn't the need for an increase in the measure go against this statement?

You all know that stocks run in cycles. Are we in a down turn? Perhaps, but the conservation measures that are in place in Maine are what got us to where we are. If "Mother Nature" has other plans, then I don't believe that we can change what is going on in nature. Perhaps it is because of the slow increase in groundfish that is the reason for low recruitment numbers. Perhaps, because of the change in ocean temperatures. My point is, I don't believe that we will be able to keep the numbers as high as they were due to the change in nature.

Now, my BIGGEST reason for not changing the gauge is because I fish in the area known as the "Gray Zone", in downeast Maine. It is bad enough that I return our proven broodstock to the water only to have a Canadian fisherman catch it and send it to market at a time of the year when it will be sent to the United States, and come down US route 1...past all the fishermen that have tried to protect that lobster.

Now we will be returning to sea the lobsters that this measure is supposed to be protecting to again, be caught by a Canadian fisherman and sent to market.

SHAME ON ANY AND ALL OF YOU THAT VOTE TO INCREASE THE LOBSTER MEASURE.

And I will blame NOAA and the DMR for not acting upon the issue of the gray zone to either establish a single boundary line or to come up with an agreement to co-manage the gray zone...Mostly on NOAA since they were directed by Senator Susan Collins to work with the Maine DMR and the local people directly involved with the fisheries in the gray zone to work out a solution!

Thank you for the opportunity to speak on this extremely important issue. John Drouin

April 7, 2023

Ms Caitlin Starks & Board:

In response to March 9th Revision of Draft Addendum XXVII Amendment 3 to American Lobster Fishery Plan (Plan), please consider this letter as my Public Comment. My name is John Godwin and I own and operate Point Lobster Co., Inc in Point Pleasant Beach NJ. Our Federal Dealer permit is #1852 and I am on the American Lobster Advisory Panel. My qualifications to be considered as a participant in the fishery can be measured by Point Lobster Co's 2022 purchases of 253,358 lbs of Massachusetts lobsters and 138,400 lbs of Maine lobsters, both having aided in the sale 1,100,00 lbs for 2022.

Thank you for the opportunity to comment on the plan. On page 3, the plan states "Increasing consistency across management areas may help to address some assessment and enforcement challenges, as well as concerns regarding the shipment and sale of lobsters across state lines." This rhetoric can be seen as far back as the October 2016 ASMFC Draft Addendum XXV where on page 15 it states, "When considering changes to the gauge size, potential impacts to interstate commerce should be considered. It is likely that an implementation of gauge size changes, or any of the proposed measures in the addendum, will create increased demand and shipments of lobsters from different LCMAs, including those Areas in the Gulf of Maine and Georges Bank (GOM/GBK). Currently, the minimum and maximum sizes in place are possession limits, meaning harvesters and dealers must abide by their state's regulations. While these strict regulations improve enforcement of gauge sizes, it can complicate interstate commerce as lobsters legally caught in LCMA 1 have a smaller minimum gauge size of 3 ¼". Massachusetts, because it has lobster landed from four LCMAs, is an exception to this and is only able to enforce LCMA-specific gauge sizes at the harvester level with significant penalties for violations. Some states, such as Rhode Island and Connecticut, allow dealers to possess smaller lobsters legally harvested in other LCMAs as long as those lobsters are not sold to consumers in their state. Dealers are required to have thorough documentation regarding the origin of lobsters below the state's minimum size and these smaller lobsters must be kept separate from those lobsters legally landed in the state. States should consider adopting similar language to minimize economic disruptions in the GOM/GBK stock."

During the May (2-5) 2016 Spring Meeting I submitted Public Comment about this management measure. The Lobster Management Board recommended I seek relief at the State level. ASMFC was not willing to provide instructions on a State level, as the board determined it can only provide mechanisms for a state to meet its obligations under the plan. As a result, on May 12, 2016 I petitioned the NJ Fisheries Council to grant relief on the Possession limits to allow for the receiving and storage of lobsters that fall below the states minimum size but were purchased from Maine or Massachusetts legally. The motion passed but was never written into State of NJ regulation because ASMFC found the regulation to be conflicting with what the Board perceived as 'compliant'. Additionally, Senate Bill A939 was introduced to grant relief but never passed, as was Assembly Bill S1157, also never passed.

In reference to the March 9, 2023 Addendum XXVII, the Board has identified inconsistencies in regulations that should address the interstate shipment of lobsters. Beginning on page 12' 2.7.2 INTERSTATE SHIPMENT OF LOBSTERS

Increasing consistency in regulations may address concerns regarding the sale and shipment of lobsters across state lines. With decreased landings in SNE and expanding markets for the GOM/GBK stock, there has been increased demand for the shipment of lobsters across state lines. This movement of lobster can be complicated by the fact that the gauge sizes differ across LCMAs, and many states implement the minimum and maximum gauge sizes as possession limits rather than landing limits per state regulation or law. This means the gauge sizes apply to Draft Document for Public Comment 13 anyone in the lobster supply chain, not just harvesters. While these strict regulations improve the enforcement of gauge sizes, it can complicate interstate shipment of lobsters, particularly given the minimum size in LCMA 1 is smaller than the other management areas. As a result, some dealers must sort lobster by size in order to ship product across state lines. Moving toward more consistent minimum sizes within the inshore LCMAs would help alleviate this issue by easing the ability of states to participate in the GOM/GBK lobster supply chain. This would not only reduce the burden on dealers that sort product by size but also enhance the enforcement of gauge sizes in the fishery.

2.7.3 Improve Enforcement Another potential advantage of more consistent management measures is the ability to improve enforcement throughout the stock. Currently, disparate management measures hinder the ability for law enforcement to enforce various regulations in the lobster fishery. For example, vessels landing in Massachusetts harvest lobsters from four LCMAs, each of which has a different set of minimum gauge sizes (ranging from 3 ¼" to 3 17/32") and maximum gauge sizes (ranging from 5" to no maximum gauge size). Because a dealer can legally purchase and sell lobsters from areas with different minimum and maximum gauge sizes, only the most liberal measure can be implemented as a strict possession limit. The Law Enforcement Committee has continually recommended the use of standardized management measures in the lobster fishery, as inconsistent regulations mean that the least restrictive regulation becomes the only enforceable standard once product leaves the dock. In addition, regulatory inconsistencies decrease the likelihood of successful prosecution of violators.

The verbiage seen in the latest Draft clearly outlines the necessity for some level of relief on dealers. Point Lobster has records obtained from NMF/NOAA port sampling where our facility can have 1.4% of the inventory that falls below the State minimum size of 3 3/8". The annual sum of this 1.4% equates to our 2022 exposure of 15,400 lbs (1,100,000 lbs x 1.4%) that could be seen as a violation under the current law. Any law-abiding business or enforcement agent could reasonably discount 1.4% as an allowance but the possession limits do not allow for anything below the state minimum. I have performed exercises in the presence of Federal and State enforcement agents where the dealer could measure lobsters upon delivery but all parties agree that it is not a realistic goal when any truck load volume is being purchased out of state. The impact of the current regulations was preceded by a warning in 2009 under the Federal American Lobster Management In The Exclusive Economic Zone NMF – June 2009, where on page 76 NMF/NOAA states "*However, in choosing no action alternative, differences in state and Federal regulations across multiple management areas could cause some confusion within the industry and for managers and may inhibit effective enforcement of fisheries regulations.*" The summary of this letter is to provide ASMFC, NMF, NOAA, and NJDEP with a report that the varying regulations are creating confusion, and the interstate shipment of lobster has become complicated, and the enforcement Committee recommendations are accurate. ASMFC should move to a standardized measure for dealer possession.

The possession limits were intended as a harvest measure. The lack of resources and difficult nature of using the possession limit as an enforcement tool has led to a myriad of complaints filed against law abiding businesses. In 2016 NYDEC seized 1100 lbs of lobsters from a retailer in Schenectady, NY; the lobsters were legally obtained from a Massachusetts dealer but deemed 'undersized' based on NY regulations. Point Lobster has had similar experiences with enforcement, in June of 2009 we were found in possession of legally obtained lobsters that did not meet the NJ minimum. The case of State NJ v Point Lobster Co., Inc was awarded to the state where pursuant to C.F.R. 697.6(1) *any dealer must comply with the more restrictive requirement.* There is visible doubt that these regulations were intended for dealer prosecutions, but they are. ASMFC should provide the mechanisms to protect those who participate in the industry after the lobster is harvested.

Sincerely,

John Godwin

From:	direction@skymate.com
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Friday, April 7, 2023 10:26:16 AM

Dear Caitlin,

My comments for Addendum XXVII align with the AOLA. The only difference I have is with Sub-Option B3. I agree that the v-notch definition should be standardized, but as zero-tolerance through all LCMAs. Thank you.

John Moore Captain F/V Direction john.g.moore2@gmail.com

From:	Jon Carter
To:	<u>Comments</u>
Subject:	[External] Comment to the ASMFC on Addendum XXVII
Date:	Friday, March 24, 2023 8:55:23 PM

I am Jon Carter, Chairman of the LCMT Area 1. I believe that the LCMT should have had the opportunity to meet regarding this addendum. I contacted our commissioner, Pat Killaher last summer and asked him if we could meet. He said, at the time he didn't think it was necessary because he didn't think this was going to go anywhere but he would keep me in the loop, which didn't happen. I feel very frustrated that this has now gone to public comment without giving the LCMT the opportunity to meet and present the board with our collective input.

In the past, the LCMT was extremely active and I believe very helpful to the board. When we had an issue we would come up with several proposals on how to best deal with what was happening at the time. While I'm not against a trigger mechanism for recruitment I am against the proposal of going up on the measure for two important reasons.

1. If we go up on the measure, we give the chick market to the Canadians. I was told by a local dealer how important the chick market is to our business. Do I believe that going up on the measure will kill our fishery? No, but it would severely impact our markets, which if you paid any attention to last year, our markets are fragile, we all felt the huge financial impact.

2. If we are really worried about recruitment why wouldn't we think about putting more valuable eggs on bottom to generate more sublegal lobsters? The larger lobster gives us more bang for the buck and we've been told by science for the past 20 years that the larger lobsters have more eggs, are more viable and more apt to produce. I'm extremely surprised that the scientific community hasn't stressed that point to the board.

3. Gauge sizes have been different in all areas for many years and has worked. We don't need to change something that isn't broken.

4. Interstate shipping has been going on ever since there has been different gauge sizes. Massachusetts is the state that has the most gauge differences but I believe they have made it work.

5. No matter what we do, enforcement will always be a challenge. It is up to the States to deal with their enforcement.

In years past, we got huge benefits by talking about going down on the oversize measure. This way we are putting more eggs on the bottom and protecting our markets. The processors rely on the chick lobsters for their 3 and 4oz tails. It is their best seller. Why would we take that away from our Fishery and give it to the Canadian Fishery?

I understand that this board is made up of different people than when the LCMTs were more active and perhaps don't realize all the important work that was done to help shape this area management. I feel it's a shame that Massachusetts, New Hampshire and Maine let the LCMT process dwindle and my hope is that we can renew this with fresh blood and let it be active and helpful to the ASFMC Lobster Board. Thank you for your time.

Sincerely, Jon Carter

From:	Jon Granlund
To:	<u>Comments</u>
Subject:	[External] lobster draft addendum xxv11
Date:	Wednesday, March 15, 2023 8:58:43 PM

status quo for me outercape license # 002332 tech problems!!!!

Sent from my iPhone

From:	Julian Lemai
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Monday, March 13, 2023 8:33:28 AM

I am currently a high school senior at Winnacunnet High School in Hampton, NH and I recently started researching this draft addendum to Amendment 3 for a school project in my Foundations of Democracy class with a classmate of mine. Reading through the proposed additions to Amendment 3 and their plans to provide more safeguards in place for lobster spawning stock and juvenile lobster populations I found them to be necessary ideas which should be voted in. I understand there has been some pushback from local lobster fisherman which I found totally understandable but I think in the long run these protections will help sustain their livelihoods far into the future.

Best regards, Julian Lemai and James Stewart at Winnacunnet High School

From:	Justin Papkee
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Wednesday, March 8, 2023 5:43:53 PM

My name is Justin Papkee. I fish commercially for lobster, crab, and Menhaden off of Long Island, Maine. I fish in Maine state waters as well as area 1.

-I am in favor of implementing a gradual measure increase using a 32% decline in the trigger index to initiate it. The benefits of increasing the measure and allowing the majority of female lobsters to reach breeding size cannot be overlooked. Using the trigger means there already would have been a decline in the stock, and allowing more lobsters to remain in the biomass to breed would be a good thing to help combat that decline. Economically, the measure increase will also be a benefit. Initially there will be some lobsters that we would have been able to keep but cannot, but in the long term, 6 months to a year later, we will catch those lobsters and they will weigh more.

- I do not think that lobsters coming across the border into the U.S should be allowed to be smaller than the minimum sizes that can be kept by U.S. fishermen. I am completely opposed to waiving the Magnusum Stevens act to allow sub legal lobsters to come in from Canada. Allowing these lobsters into the states also goes against the idea of creating standardization of management measures.

Thank you for your time and consideration.

Best,

Justin Papkee

March 12, 2023

To whom it may concern;

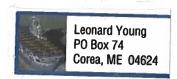
I am against the measure increase. Bargaining with other states to bring them in line with our conservation measures sounds good on paper, but we have always been more restrictive than the other states. There are states that have a larger measure than we do, are they raving about how much it helped them?

The increase in production we enjoy today got there through the demise of the ground fishery. Taking away natural predation, and the increase in water temperature. I do not believe you can stop the decrease in the lobster population with fish coming back. Add increased water temperature, which may help to some degree. I believe the water temperature also changes water currents which make it harder to pinpoint lobster settlement. Perhaps even put them on less survivable grounds. Is the benefit of raising the measure enough to out way the temporary drop in catches and possible permanent loss of market share to Canada truly there?

Perhaps the decrease in lobster production and increase in fish stocks could bring down bait prices and increase lobster prices leading to a more viable fishery.

Sincerely Leonard M. Young

Maine Lobster Fisherman



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t Substant



March 31, 2023

Caitlin Starks Atlantic States Marine Fisheries Commission 1050 N. Highland St. Suite 200A-N Arlington, VA 22201

Regarding: Draft Addendum XVII to the American Lobster Fishery Management Plan

Dear Caitlyn,

I believe there should be an increase to the gauge in LMA1 to 3 3/8". Since the LMA1 fishery is predominantly a recruitment dependent fishery, increasing the minimum gauge to 3 3/8" would be the most beneficial to the spawning stock biomass (SSB). Also, I would encourage no further delays, given the Addendum was initiated in 2017 and some of the management options wouldn't go into effect until 2028.

LMA1's landings involve only a narrow range of lobster sizes and the fishery is recruitment-dependent, i.e., catching primarily lobsters just over the minimum size. Ninety percent of the lobsters landed in LMA1 are under 100 mm carapace length (Shank & Kipp, Draft Addendum XVII, Appendix B). The current legal minimum size in LMA1 is below "L50", the size where 50% of the female lobsters are estimated to be reproductively mature. This means increasing the minimum closer to L50 will result in large increases to spawning stock biomass. Increasing the minimum gauge would result in a temporary loss of undersized lobsters to the fishery, but in a few years' time those lobsters will recruit into the fishery, likely as more valuable catch. The proposed increase in LMA1 minimum size to 3 3/8" carapace length would increase SSB by 38% and increase the total landings in terms of weight by 5%, according to the analysis presented in Appendix B.

I also believe that LMA3 should remain status quo, i.e., no changes are needed in maximum or minimum gauges. The size of the LMA1 fishery (landings) is roughly 30 times larger than the LMA3 fishery. The analysis in Appendix B is based on the relative size of landings in each fishery and indicates:

"that a maximum size of 6" in LMA3 would result in an 8% increase in SSB per recruit, and a minimum size of 3 3/8" in LMA 1 would result in a 38% increase in SSB per recruit. What this means in rough absolute terms (using 2018 landings) is 8% of roughly a 4,400,000 lb. exploitable biomass in LMA3, versus 38% of roughly a 130,000,000 lb. exploitable biomass in LMA1...In absolute terms the options in the addendum for LMA3 and LMAOCC will only have a fractional, if not immeasurable, impact on increasing stock wide SSB." 1

¹ Bob Glenn, MADMF as representative of the PDT "Draft Addendum XXVII on Gulf of Maine/Georges Bank Resiliency" memo to Caitlin Starks

While I prefer that LMA3 stay status quo, if the Lobster Board feels action is needed in LMA3 in addition to LMA1 gauges changes, I would support, as an alternative, a 7" entrance ring in LMA3 as a follow-on addendum. This would be a more appropriate change than decreasing the maximum gauge, which results in a permanent loss of oversized lobsters to the fishery. A change to the entrance rings would select which sized lobsters can access the trap, so it's a valid approach to protect large individuals.

In addition to supporting an LMA1 gauge change and opposing changing the gauge in LMA3, I support a standard v-notch possession definition and reducing the initial replacement trap tag allowance from 10% to 5%

Sincerely,

Marc Palombo, President, Calico Lobster Company

From:	Matt Gilley
To:	<u>Comments</u>
Subject:	[External] Lobster draft addendum XXVII
Date:	Friday, March 31, 2023 10:27:55 PM

My name is Matt Gilley I am the zone f8 council representative and live and fish out of Cundy's harbor maine. I see the reasoning for this addendum but there are still several issues that aren't addressed. There are some good aspects of this that I do think will help One of these is addressed in that of issue 1 I see options b1 and b2 helping the stock significantly. There have been studies that show lobsters over 4" in size produce 15 times the young of that of a smaller lobster. By decreasing the maximum size and making the notching more uniform I think we can achieve the results we are looking for while leaving issue 2 status quo. Eliminating the 3 1/4" measure will destroy one of the biggest market in shore fisherman have. There will be no more 1-1.25lb lobster to buy from a us fisherman. Canadians will have the entire market. The economic effects this will have will be detrimental to the fisherman. Dealers and restaurants will still be able to buy these smaller lobsters from Canada for a lesser price than ours thus flooding our market still. There is no way the board can guarantee we will get a better price for the better product we would be catching with a size increase. With a decrease in quantity and a increase in quality you would think we would get a better price. But those lobsters are just gonna be caught by our neighbors just like the shrimp are. I also think if a trigger is going to be used that landings has to be factored in somehow. It could be weighted against trawl surveys ventless traps and other studies but the ultimate goal of the industry is landings. For this to not be factored in at all makes little to no sense. The industry is still facing many uphill battles with offshore wind and whale rules pending in less then 6 years. We don't need any more hardships. Thank you

Matthew Gilley

To the Atlantic States Fisheries Commission

I am writing in regards to the proposed regulation changes addressed in the Draft Addendum XXVII to Amendment 3. These regulation changes will surely have a negative impact to the Outer Cape lobstermen and their families and I see no other option than STATUS QUO for both Issues in this addendum.

I am a current state permit holder in the OCLMA, one of 63 active permits in the entire OCLMA and one of 46 State only permits. We are a very small group of fisherman within the smallest LMA. The Outer Cape enacted its management plan in the early 2000's which led to an increased minimum gauge size from 3 1/4 inches to 3 3/8 inches. The raise on the minimum gauge helps maintain recruitment stock and allows smaller lobsters to reach maturity and reproduction before being legal size to keep. When the management plan went into effect trap allocation reduction was implemented based off of landings. There is also a 10% trap reduction tax for any allocation transferred between permits, this has been continually reducing the number of allocation tags within the OCLMA. The average state only permit allocation is currently 393 well below the 800 standard allowed in other LMAs. Along with reduced allocation the OCLMA also experiences the longest mandatory closed season, which has now been extended as late as May 15th due to the presence of whales. These management measure that have been previously imposed have drastically decreased the fishing effort with in the OCLMA. Those changes alone are enough to warrant our current V- notch and no max gauge regulations. There is no way to standardize the regulations across the LMAs they are all unique areas that need to be regulated differently, we have already given up too much as far as allocation and fishing time due to the closure. The difference our current 1/4 v-notch and the no max gauge makes allows us to still have a profitable fishery even with the lengthy closure and reduced tag numbers, with out our current regulations you will destroy the Outer Cape state lobstermen.

If changing our measurement regulations is being done for better standardization across the LMAs then why not give all the other LMAs the same seasonal closure and allocation reduction that we have already enacted in the OCLMA. I don't think that would go over well because that's a huge hit to them, just as these changes will be a huge hit to the OCLMA. Will any of the current OCLMA permit holders be compensated for the additional loss we will be implemented to the imposed regulation changes. Many guys gave up federal permits to be able to fish strictly state water and the state regulation set, will anyone be compensated for what was giving up to obtain our current management plan. This will just be to much piled on top of the cuts we have already taken to our season length and allocation as a management area.

The most problematic concerns I have with the overall stock assessment and Addendum XXVII is the little to no data that has been collected on the Outer Cape. I am a University of Rhode Island Alum with a B.S. in Marine Biology, to me there seems to be to large of a gap in data collection and research to even entertain the idea of imposing regulation changes with insufficient data. Seems as though we have a very unique area here on the Outer Cape with an abundance of lobsters but no research into what is actually happening here. We are trying to be forced into regulatory measures adopted in other LMAs due to extensive research within those LMAs but with no research to our own OC Management area. We have been told that there is no need to look for any settlement or recruitment in the OC because it does not possess prime benthic habitat for settlement. We have also been told that there is no funding for research and that the research gear won't work in our OCLMA. Although we do not have a rocky shoreline which is considered to be the prime benthic habitat for settlement we do have rocky cobble bottom not far from shore. When looking at larval transport potential patterns OCC had the highest retention rates throughout all of Maine and Massachusetts with \sim 40% (H. Xue et al., 2007). So if the OCC has large population of breeding lobsters and it is retaining a large percentage of the larvae released with in the OCC then why is there no research or data being collected here to see what happens with settlement and recruitment. Maybe instead of just saying that it is not prime habitat and we don't need to look there we

should be collecting data and actually looking at what's happening instead of guessing. Its been proven over time that species in different areas and environments can adapt or evolve to survive, why is it not feasible to think that possibly the lobster settlement in the OCC happens a little deeper than the rest of the north east coast because of its unique shoreline. I can show pictures of YOY lobsters that I have found in my traps in the OCLMA.

Another concern I have with the proposed changes are the economic impacts the proposed changes will have on us Outer Cape Lobstermen. The estimation of potential impacts resulting from standardizing regulation in LMC OCC done by Tracy Pugh for Massachusetts DMF estimates a 2-4% loss to the OC Lobstermen if the 1/8 v-notch and 6.75" regulation changes are imposed. I believe these numbers are not completely accurate and are actually much higher. The imposed maximum gauge of 6.75" would cause a permanent loss, lobsters that could never be kept and never become legal to keep. These proposed regulation changes would have a substantial impact to the OCC lobstermen, and I will ask you this question, does anyone want to take a 2-4% (potentially more) pay cut to their salary? Besides the economic loss due to catch that these regulation changes will also decrease the value of our Permit/Business. Our permits/tags are an intangible asset to our business and many of us have invested hundreds of thousands of dollars to obtain them we can not afford to have our business's devalued over regulation changes that impose a minimal impact to the overall stock. With increasing costs to bait, fuel, and every other expense we have due to this inflating economy these regulation changes will be crippling to the OCC lobstermen.

With the potential for stricter regulatory measures being pushed to increase the abundance and protect the stock, has anyone studied or even thought about the carrying capacity of the American Lobster? Is it possible that the historic numbers that were seen in recent history were somewhere near the species carrying capacity. How many large females can be left in the population and still maintain a successful exploitable population. If too many large female lobsters are left on the bottom never to be kept at what point will it start to impact the size of the exploitable population. Most culling of species happens to the non productive, when an animal is past its prime, I don't think enough research is done on the larger over sized lobsters to determine how fecund they actually are. Most research on egg production and viability is done on lobsters on the smaller size scale, very rarely are any over 170 mm CL studied, those lobsters that would be considered over size under the new regulation. Are those lobsters still productive enough to warrant being left in the population? I believe they are like any other species and they're fecundity decreases passed a certain age which is why I do not believe a maximum size gauge should be implemented. Those largest lobsters should be removed to make room for more reproductive smaller ones.

And if the main concern for implementing a maximum gauge is exclusively an enforcement issue then a very simple solution to that would be to issue over sized tags to OCC trap lobstermen. Tags could be issued to individual permit holders just as our trap tags are issued with permit numbers on them, these tags could be affixed to the knuckle of an oversized lobster as it is harvested on the boat and would remain on the lobster until it was cooked. This would allow enforcement to view any over sized lobsters in any market and if they do not possess an OCC issued oversize tag than it is illegal. Very simple solution to that problem.

The overall lobster stock in the Gulf of Maine and Georges Bank has increased drastically in the past 20 years, we have seen record high landings and abundance levels, and it has all happened with the current imposed regulations. The issues that are being seen with low recruitment and YOY levels are not an issue that can be fixed by regulation changes. It is not that there are not enough lobsters reproducing, it is that they are not surviving out of the stage 4 larval phase. If it is an environmental factor than changes to regulations aren't going to fix it. If it is a predation problem changes to the regulations will not fix it. If it is a lack food source regulation changes will not fix it. Figure out what the real problem is before you change regulations that are going to negatively impact the hard working Outer Cape Lobstermen and their families.

We the Outer Cape Lobstermen have put everything we have, blood, sweat, tears, and money into our business' and we are asking to leave us be until you have sufficient research and data collected with in our management area. We want our own OCLMA research and we are willing to help get it done but please do not make a regulatory decision to our management area without having the proper data needed.

Issue 1 : STATUS QUO Issue 2 : STATUS QUO

Thank You, Michael O'Brien

Reference:

H Xue et al., 2008 Connectivity of Lobster populations in the Coastal Gulf of Maine Part 1:Circulation and larval Transport. Ecological Modelling. 210, 193-211

April 4, 2023

Michael Polisson, Rockport, MA stakeholder/fisherman/consultant

Comments on addendum 27

In all the hearings and discussions I have heard nothing of predator interaction with either lobster spawn or its affect on larval settlement to the bottom. This seems to be extremely relavent to whether or not to feel the need for this drastic addendum to lobster management.

All the figures and observations are at least two years old and do not consider the affects of predators.

Especially last years vast abundance of menhaden was not considered.

Sea herring eat lots of the spawn before it settles

Stripe bass are voracious in their attacks on lobsters of all sizes which make up 65% of their diet. There are pictures of stomach contents of these fish to substantiate this claim...Mass DMF has one I sent them a few years ago.

Whales are not considered either and they filter feed everything from the huge gulps of seawater they injest to feed.

There are too many things not considered in this addendum at this time so the only thing to do is postpone action on this addendum till these predator factors can be analysed and figured into the big picture.

There is no question we do not have enough CURRENT information and data to form an accurate conclusion before we make any decision on addendum 27 except **STATUS QUO STATUS QUO STATUS QUO**

THERE IS ONLY ONE ANSWER AND IT IS STATUS QUO, STATUS QUO

This addendum is totally unnessary at this time due to the following reasons:

Assumptions are based on old and faulty data provided by NOAA

No one should make a decision on data that goes back to 2017

Any type of an automatic trigger is total stupidity when it cant be automaticly reversed in the same . manner

If you have to wait until another addendum is proposed to reverse any changes that means you will have to wait another 6 year!!!!! REALLY

Settlement data is not taking into count the natural predation of predator species like Stripers which get 65% of it daily meals from lobster spawn and fry and even larger ones

Having only 11 sampling sites in MASS does not give an accurate assessment and having none in the area 2 and Outer cape areas just makes the assessment far less believable.

Using any data from NOAA is your biggest mistake as its proven their data is the most unreliable in the industry.....they cant tell a march hare from a haddock!!!!

At this time the economics and survival of the fishermen must come first!!!!

A gauge increase would devastate the industry and give Canada an additional 40% market share overseas which would be a death sentence for USA lobstermen

Talk about law enforcement in MASS is a joke as at present there are 45 unfilled vacant positions.....and im told a hiring freeze is ONGOING???????

The last time we went for a gauge increase to better the reproduction rate we got screwed and the following year the Canadians went back to 3 3/16 and our

government refused......we lost 20% of our catch the first year and the following year the Canadians stole 25% Of our market overseas cause we had no chickens to sell!!!!

With skyrocketing bait and fuel prices and the actions of the San Diego Aquarium

You must vote in favor of our US citizens and commercial fishermen who work hard to pay taxes and your wages and feed and clothe their families

FOR ALL THE ABOVE REASONS YOU SHOULD FEED THE ADDENDUM INTO THE SHREDDER AND LEAVE EVERYTHING AS STATUS QUO STATUS QUO STATUS QUO

THANK YOU

Massachusetts is only having one hearing and its virtual not in person

Maine is having 4 three in person

MASS having only one and having it virtual ??????

THIS IS TOTALLY BULLSHIT

JUST ANOTHER WAY AROUD HAVING TO LISTEN TO THE STAKEHOLDERS INPUT AND CONCERNS

IF THEY CAN HAVE INPERSON FOR POGIES THAN LOBSTERS SHOULD BE TOO

COSIDERING ITS VALUE COMPARED THE THE LOWLY POGIE

I DON'T HAVE A PHD BUT I KNOW BULLSHIT WHEN I SEE IT

From:	Michael Sinclair
To:	<u>Comments</u>
Subject:	[External] Webinar won't launch
Date:	Wednesday, March 8, 2023 4:38:43 PM

Webinar will not launch for me on three devices, all devices are updated.

Typical of the government/NOAA/American States to have hearing sites that are over two hours driving time for the Southern Maine area and don't make a simple seminar like a Zoom call. Very frustrating when every town uses Zoom or other video platforms that actually work.

I am against going up on the measure for lobster and against increasing the size of the vents. Let things alone as the last few years have been troubling enough for fishermen, The sampling program needs to go where the lobsters are actually shedding which is in deeper waters and not in the shallow waters in the abundance that we once saw. The lobsters are there, this is nothing new as the sky is falling has been happening for years, check Carl Wilson, UNH, UMaine, etc, data and research in the mid 2000s. Industry was going to fail but in the 2010s, the lobster industry experienced its biggest years. This is way too premature to set triggers and to change the Maine lobstering industry. A few bad years is not a bad thing, it weeds out people and the strong survive.

No for increases in the measure or vents unless the entire industry including Canada goes to a bigger measure at the same time.

I am not for going up on an gauges or vent size unless all areas including Canada do the same so that the lobster industry is all on the same footing.

RECENTED postmarked 4/3/23 16 NEWPORT Rd By: bonh HULL, MA. 02045 April 2 2023 ASMFC Arlington VA. To whom it MAY CONCERN, I AttENded The public hearing on wed. 29 MArch Conducted by ThE MASS. Div. of MARINE fisheries, The subject was to address potential Changes to The lobster fishing Industry. The information presented, I find closs Not justify The recommended proposals, Thave held A MASS. Lob License Since The Mid 1950'S and Then A federal lobster And multi species license When first issued. IN regard to The lobster industry. Ma observation have seen periods of plenty And Then periods of Not So planty, Cycles have come and go without regulations. ONCE The lobster groupe was increased a few years breek, WE did SEE INCREASES IN OUR CATCH. The lobsters had A ChASEE to reach sexual maturity before harvesting. Its A fishery ThAt few degrative Aspects. A pressive trap That feeds Allows juveniles to exit And does not damage The End product. The trap itself is witnessed to be a ineffective devise. We don't catch The Entire POPULATION Cycles IN This fishery occur, mother MATURE sees toit,

16 NEW Port Rd HULL, MASS April 2 2023 In Not CONVINCED At This time, Adownward tread IN Settlement should be Acted on with more regulations. Im Asking for more time, to Leave Things As They Are Status Que Respectfully Peter M. MALOMEY

From:	Nicholas Otoole
To:	<u>Comments</u>
Subject:	[External] Lobster amendment
Date:	Thursday, April 6, 2023 7:59:36 AM

To who this may concern

My name is Nicolas O'Toole I have an outer Cape lobster license state only permit number 001544 I just like to let you know that these new regulations are very concerning to me and the other fishers in my area we are already operating on such a thin margin of profit with the ongoing inflation in this country fuel price bait cost Traps and gear supplies have literally all tripled making what's left at the end of the season not very much for the boat owner lately A 15% cut in revenue because of these regulations. A 15% cut in revenue because of these regulations would be terrible most likely Forcing people out of business slowly .Not To mention we're just coming off a two year pandemic that made things incredibly difficult to operate. Our season it's already incredibly short and we really only harvest lobsters from June till October In-state waters once they migrate pass the 3 mile line late October our season is over I'm not gonna get into the zero data scenario for outer Cape cod that's already been made obvious but I would like to say feel free to look up my landings and take that number and Times it by 10 and that's what we're already throwing back on a daily basis with egg bearing females and the v notches deeper than a quarter inch if that's not conservation alone I don't know what is we have many days in the first half of June and July where we release 1000 pounds to keep 200 and the same thing happens all over again in October when they put the eggs back on.. Once again Outer Cape cod lobster management area is very unique and I believe it needs to be studied before you go shove new regulations down everybody's throat's that could be devastating to an already small group of permit holders that are deeply invested. Tag values And permits that range anywhere from 300 to 500 a tag I myself have invested everything I own into this business because I was forced out of ground fishing by the federal government with catch shares management system that was devastating to the small boats of Cape Cod I really have no other choice in life then lobstering. Like I said before please reconsider this amendment I vote for Status quo for outer Cape cod. Sincerely yours Nicholas O'Toole

To the Atlantic States Marine Fisheries Commission,

This letter is pertaining to the drafted American Lobster Addendum 27. As one of the 46 state permit holders in the Outer Cape Lobster management area, I see no other viable option than status quo. The current lobster management plan has been proven effective and successful. These new proposed regulations have been developed on data with huge gaps in the study. Being a small fleet comprised of fishing families with deep roots in the industry, we are now faced with the inability to provide for our families.

The current lobster management plan, put into place in the early 2000s, has been proven a proactive and successful means of protecting the lobster stock. Our large escape vent size prevents us from landing small lobsters that are, in fact, legal in other areas. Our minimum gauge size increased from 3 ¼ to 3 3/8 inches while other areas remain at 3 ¼". This has substantially decreased fishing of recruits while significantly increasing reproductivity upward of 40%. We have a maximum trap allocation of 800 but the average allocation per permit holder is only 393 tags. We also have a 10% trap tax that occurs during any permit or tag transfer. These regulations combined with conservation minded permit holders have created a thriving and sustainable fishery.

Outer Cape Cod is a management area yet it is being left out of the data collection to properly develop a management plan per Addendum 27. As stated at the ventless trap seminar at the MLA trade show on 3/24/23, OCC has not been included in the ventless survey due to the financial impact as well as the complications that come along with gear that will not stay put. At the public meeting in Quincy, MA on 3/30/23, when asked again about the lack of ventless trap surveys on the outer cape, there was no mention of financial or gear issues, only that the migration patterns of the lobsters make it unnecessary to survey the area. When asked about the lack of surveying in the Outer Cape such terms as "we think", "we're pretty confident" and "probably not an important dynamic" were used to describe the area. These are not science backed answers. Some other inconsistencies came about when looking into the statistics. The original data gathered and published on October 19, 2020 in the American Lobster Benchmark Stock Assessment for the recruit abundance survey (Table 54 page 216) does not match the numbers of the same chart indicated and published in Addendum 27 (Table 5 page 35). Furthermore, the bottom graph, MA-514 (Page 7), of the drafted addendum indicates Massachusetts as the only region with a favorable rise in the year of the young. Aside from evident gaps in data collection, it appears addendum 27 would make the jobs of law enforcement easier by standardizing the regulations. Each lobster management area is unique and is meant to be managed individually, not universally.

As fishermen, we are committed to preserving the resource. Our fleet has volunteered our time, money, resources, and knowledge to aid the Division of Marine Fisheries, the ASMFC, and any other organization in data collection to further ensure sustainability. Not only have we poured our blood, sweat, and tears into our careers as lobster fishermen and women, we have planned our whole lives around it. Our small fleet is predominantly made up of young families who have built businesses from the ground up. We are carrying on family traditions. We have been compliant and adaptable to the myriad of experimental regulations thrown our way all while trying to stay afloat. Addendum 27 will certainly sink us. Status quo is the only option.

Thank you, Olivia Stohr

ASMFC Lobster Fishery Comments

Thank you for receiving my input on this very important lobster management issue. I have been fishing for lobsters since 1971, so 2023 will be my 53rd season. After fishing under a recreational license for one year, I embarked on fishing commercially for two seasons (7 month season). I fished 180 traps inside Quincy Bay and along the islands and shore of Hull out towards Nantasket and around the the Brewster Islands and back around the inner Islands. After 2 seasons I decided to return to part-time fishing with about 40 traps. I returned to fishing in Quincy Bay and the inner islands. Lobsters were fairly plentiful. I fished within 2 miles of my home port of Hough's Neck. Over a period of years my lobster catch varied, but there seemed to be a general decline. Then there was a decision by the managing agency at the time to institute a minimum gauge increase from 3-1/8 " to 3-1/4" over a period of 5 years. It has been so long since the gauge increase, I can't remember the exact year it was started. This conservation measure seemed to do two things: the minimum lobster size increased and the lobster stock was more plentiful. There were more lobsters available to catch. Of course there was another important conservation measure reinstituted. When I started fishing in 1971, there was no notching of female lobsters. At some point that changed and we began notching all berried females. This was a plus for the stock.

About 12 years ago I continued fishing part-time but I increased the number of traps I fished from 40 to approximately 75 traps. I have consistently fished the same number of traps for the past 12 years. We have seen some changes albeit over a period of years. I have seen a general decline in the lobster stock within the harbor. I attribute some of this to the ever increasing water temperatures inside the harbor. But the general number of lobsters available to catch has declined as well. I also know there are fewer lobstermen fishing around me. So my catch has even declined with less competition. I expanded my fishing grounds within the harbor inside of George's Island with limited success. This past season I ventured back out to the Brewsters, an area I hadn't fished in 50 years. I had very limited success and eventual moved my gear back inside as we had a little more movement inside in the fall.

We still have a run of lobsters in early June, but the run lasts for less than a few weeks. Previously the run could last for 5-6 weeks. The bottom line is there are fewer lobsters available for the lobstermen to catch. I still fish a 3 day set and a 4 day set each week. I know some lobstermen that have gone to 1 week sets and do okay, but they are probably catch half the lobsters in a week that they caught 6-8 years ago. When I first started fishing, we pulled our gear every other day and some pulled every day when the lobsters were running.

The fishery has changed dramatically in 53 years. The environment the lobsters live in has changed substantially. The winters are milder and the summers are hotter, so the water temperature is generally considerably warmer.

I can only speak for myself. I don't want to speak for any other lobsterman. I also know that our catch can vary from season to season. What I'm experiencing is a very noticeable general decline in the lobster stock. We benefited greatly when they instituted the last lobster gauge increase. I believe a gauge increase is essential for the fishery to remain viable in the years ahead. I'm 74 years old, so my interest is for the future of the fishery for the next generation of lobstermen. We have seen what has happened to the lobster fishery along the Long Island, Connecticut, Rhode Island, and south Cape coasts. Do we just wait for that to happen north of the Cape or do we act now when there is still an opportunity to reverse the trend? I wholeheartedly advocate for an appropriate minimum gauge increase and possibly a reduction in the maximum gauge size, as the fishery managers feel appropriate. Massachusetts at one time had a lobster hatchery, which released lobster fry into the ocean at designated locations. Has anyone given consideration to the idea of a hatchery or hatcheries to assist in increasing the lobster stock. The lobster fishery has a huge economic impact on our

economy. Given the changing environmental conditions, we may not be able to increase the lobster stock naturally. Maybe hatcheries will be a necessity in the future.

Respectfully,

Ralph Jacobs Hough's Neck, Quincy MA Massachusetts Permit # 004572

MC Fisheries Raymond Joseph 10 Thompson Trace Chatham, MA 02633

March 4, 2023

To Whom It May Concern:

I am writing to you today to express my deep concern with the proposed changes to the lobster fishery. My name is Raymond Joseph, owner of MC Fisheries, based out of Chatham Massachusetts. I currently have an Outer Cape Coastal permit 001723 which is state waters only. The proposed changes to Amendment 3 of the lobster management plan would be detrimental to lobstermen. I would also like to address some concerns with how the data was collected and calculated when deciding to change the current regulations.

The draft document claims that there has been a decline in lobster landings from 2016 to present. When analyzing this data, was there a calculation of number of traps fished for the same areas? Over the years there have been fishermen who have retired and or been preparing to sell their permits for various reasons, including but not limited to, health reasons. In preparation to sell, some lobstermen reduced the number of traps they were fishing. Was this considered when the data was collected? If there was a reduction in number of traps fished. More data needs to be provided in order to compare the number of traps fished in correlation to the number of lobsters landed.

In addition to the question regarding traps fished, one needs to consider gear loss. Every year, fishermen face the reality of gear loss due to weather, boat traffic, and other fishermen. Has there been an accurate data collection of gear loss? With gear loss comes the need to replace said gear and that comes with a growing cost. It has not been easy to replace lost gear as the price of materials and labor continue to rise. Some years, it has been impossible to replace the lost gear and you have to fish what you have. This also contributes to the reduction in lobsters landed because the gear simply isn't there to produce. As well as the rise in cost of materials, the pandemic made it hard to find materials and traps. Even if you could afford the traps, it became near impossible to obtain new ones. This lack of gear would also skew the data. In addition to obtaining new gear, if the regulations were to be changed, then the lobstermen would have to go through each and every trap to change how it is made. This would be a necessary step in order to have a trap that would be fishable under the new regulations. This would cause another financial hardship.

As you know, there is a difference between federal and state water permits, and the regulations that come with each. The fishermen are required to carry their permit on them when fishing in order to allow for law enforcement to be able to determine which waters and regulations they are to comply with. In past years, fishermen who had a dual permit forfeited their federal one for just a state permit. The reason for doing so was to fish state regulations that allowed for landing of larger sized lobsters. If the proposed size regulations are implemented, will there be a chance for fishermen to add a federal permit to their existing state one? This will be necessary in order for state permit holders to sustain their livelihood.

In the document, it discusses how the proposed changes would make it easier on law enforcement. It should not be the responsibility of the fishermen to make law enforcement's job easier when deciphering between state and federal waters and the size and v-notch regulations that come with each. Law enforcement officers should be provided with more training on the regulations in their management area as opposed to creating the same regulations for every permit and area. The ease of law enforcement's job should not fall on the shoulders and income of the fishermen. A change in regulations would cause a decrease in the income and financial stability of lobstermen.

I feel that it is necessary for the future of lobstermen to keep the status quo of option A. It is vital to keep the regulations as they are.

Sincerely,

Raymond Joseph MC Fisheries

From:	Richard Larrabee Jr
То:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Friday, March 31, 2023 9:09:38 PM

My name is Richard Larrabee Jr, I am a full-time lobsterman off of Stonington. I fish almost 100% in federal waters and I am strongly against the measure increase. I feel that any data received from NOAA can not be trusted as their organization cannot be trusted. NOAA has a record of not being truthful with fishermen about windmills, whales, or even the shrimp data. Furthermore I believe that ASMFC wants to control the Maine lobster fishery in a way that will harm the industry. Once ASMFC gets lobsters on the same gauge Maryland, New Jersey, and other states will use the data against us as a bargaining chip for other fisheries, Fisheries that Maine should rightfully have. The State of Maine has already stolen license's from it's Poogie fisherman. This has forced them to get a 25,000 lb quota just to maintain the license and a forced choice between making more money lobstering or less money .

It is no secret that I am no fan of the ASMFC as it is set up for the fishery to fail! The insure lobster fishery is already facing big changes as sea squirts have already taken over and suffocated the bottom, therefore causing the small lobsters are moving to deeper water. Next will be Quotas.

Richard Larrabee F/V ROCKBOTTOM Stonington, ME 35 years in the industry

From:	Sam Pickard
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Saturday, April 8, 2023 9:33:59 PM
Attachments:	image.png
	image.png

Sam Pickard P.O. Box 817 Wellfleet, Ma 02667

To whom it may concern, I am writing to you as the Vice President of the Outer Cape Lobstermen's Association, in regards to the impending changes in the lobster industry due to the proposal of Amendment 27. I am currently one of 62 permitted lobstermen in OCLMA. We are a very small group of fishermen due to the small zone in which we fish. Our state fishermen, meaning fishermen that only hold a state issued permit, not a federal permit, only account for 46 of the permits in our zone. The Outer Cape has their own proactive management plan established in the early 2000's as concerns about an impending stock crash. We increased our minimum gauge size from 3 ¹/₄ inch, which is still Area 1s, to 3 3/8ths of an inch, decreasing the fishing demand on the recruitment stock, and increasing the reproductivity of the stock by over 40%. We also have a larger escape vent size, eliminating smaller lobsters that are still legal in other areas by being retained in our traps. When our management plan came into existence, we implemented a trap allocation based on landings. We also have a 10% trap tax whenever a permit is bought and sold. Our state allows us to have an 800 trap maximum in our zone, but due to our sustainable management plan, the average permit in the outer cape has only 393 tags, less than half than every permitted fisherman in Area 1. We also have been cut back in our fishing season. We used to be able to set our traps on March 15th, but due to regulations with the right whales, we now have to start on May 15th, effectively cutting 2 months from our already short season.

I would also like to bring to the attention of the Atlantic States Marine Fish Council as well as the Massachusetts Division of Marine Fisheries that there has been data manipulation on the raw data in Amendment 27. I have two samples, both GBK abundance indicators one from the 2020 Stock assessment, and one from the proposed Amendment 27. The raw data is compiled in the stock assessment (Table 1), with the skewed data in the Amendment (Table 2).

Abundance		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Abundance o	of lobsters 71 xes combine			
mm CL (s	exes com		CL (SE		NEFSC		
Survey		FSC	Survey	Spring	Fall		
	fall	spring	1981	0.08	0.28		
1981	0.286	0.073	1982	0.18	0.41		
1982	0.433	0.155	1983	0.16	0.33		
1983	0.292	0.167	1984	0.09	0.40		
1984	0.407	0.046	1985	0.19	0.26		
1985	0.167	0.220	1986	0.57	0.64		
1986	0.600	0.495	1987	0.43	0.54		
1987	0.442	0.315	1988	0.09	0.36		
1988	0.405	0.242	1989	0.04	0.23		
1989	0.117	0.169	1990	0.44	0.47		
1990	0.326	0.320	1991	0.08	0.34		
1991	0.298	0.170	1992	0.13	0.62		
1992	0.566	0.128	1993	0.50	0.22		
1993	0.289	0.684	1994	0.01	0.13		
1994	0.125	0.080	1995	0.03 0.00	0.14 0.35		
1995	0.197	0.028	1996		0.35		
1996	0.378	0.028	1997 1998	0.06 0.01	0.30		
1012 Carl			1999	0.01	0.33		
1997	0.647	0.000	2000	0.27	0.33		
1998	0.361	0.012	2001	0.47	0.45		
1999	0.238	0.031	2002	0.06	0.56		
2000	0.445	0.268	2003	0.29	0.16		
2001	0.571	0.429	2004	0.04	0.18		
2002	0.489	0.091	2005	0.09	0.13		
2003	0.328	0.227	2006	0.16	0.12		
2004	0.277	0.074	2007	0.03	0.23		
2005	0.129	0.072	2008	0.05	0.17		
2006	0.098	0.221	2009	0.30	0.33		
2007	0.189	0.054	2010	0.30	0.15		
2008	0.126	0.134	2011	0.09	0.35		
2009	0.220	0.139	2012	0.15	0.17		
2010	0.050	0.105	2013	0.14	0.24		
2011	0.299	0.024	2014	0.16	0.21		
2012	0.096	0.082	2015	0.06	0.44		
2013	0.131	0.066	2016	0.15	0.13		
2014	0.103	0.067	2017	0.35	0.00		
2015	0.097	0.041	2018	0.04	0.22		
2016	0.104	0.111	2014-2018	0.15	0.25		
2018	0.370	0.111	mean	0.45			
			2019	0.16	0.13		
2018	0.138	0.035	2020	0.41	0.42		
2014-2018	0.162	0.082	2021	0.41	0.43		
mean	0.102	0.002	2017-2021	0.24	0.26		
			mean				
25th	0.129	0.057	2546	0.00	0.10		
median	0.288	0.108	25th median	0.06 0.11	0.18 0.29		

This data manipulation is very concerning, especially with data being lost, which brings the question of the validity of the data used as a benchmark of the amendment. The 2020 Stock assessment have very positive outlooks compared to the proposed amendment and the raw data has very different outcomes compared to the tweaked simulations. "Therefore the GOMGBK lobster stock is not depleted and overfishing is not occurring. Further, the stock is above the Fishery/Industry Target and below the effective exploitation target. The assessment does not recommend any management action at this time for the GOMGBK stock." "Model free indicators show that the average spawning stock, full recruit and recruit abundance are nearly all above the 75th percentile." (ASMFC 2020 Stock assessment.) To be able to have a better understanding of the lobster stock in the outer cape, we need better data, which there is none in our zone in the amendment. "For OCC, simulations were run with both LCMA 1 and LCMA 3 parameters because it is considered a transitional area." (Amendment 27 ASMFC) Even though the other cape is a transitional area, we do have spawning locations with large numbers of Young of the Year lobsters, i.e Nauset Marsh, Pleasant bay and East Harbor in Provincetown, which the ASMFC and MADMF refuses to believe. There has been independent research in these areas not only by The Center For Coastal Studies, but also by The Friends of the Pleasant Bay. The Young of the Year trawl surveys, which is a key factor in stock assessment, has many flaws. One key flaw is the sample area, which changes not only in location but also in depth from year to year. It should also be brought to attention that these surveys are not done in areas where YOY lobsters are present. "The SASC noted that trawl surveys are limited to trawlable bottom, which is generally not considered prime lobster habitat (cobbles to boulders). While lobster abundance on trawlable bottom may not be directly correlated with abundance on untrawlable bottom, the Panel notes the ventless trap survey may bridge the gap between different habitats." (ASMFC 2015 Stock Assessment) At the ASMFC hearing in Quincy on March 29th, Massachusetts DMF Director Dan McKiernan stated that the stock assessments are not even precise, further bringing the data into question.

The Outer Cape is a unique lobster management area, due to rapid changes in depth, water temperatures and multiple reporting areas. The MADMF charges every commercial lobster permit holder a renewal fee every year, and a portion of the fee is collected for ventless trap research. However, the Outer Cape does not receive any ventless trap surveys. When this was brought to the attention of the MADMF, Dr. Tracy Pugh, the foremost official on ventless traps and data surveys in the commonwealth stated "The Outer Cape Zone is not part of our proposed agenda. The ventless traps will not work in the Outer Cape due to only having sandy bottom and high currents, and we do believe that there are any YOY lobsters in your zone." Our zone is unique because we have many different benthic substrates, with the three most prevalent being sand, mud and cobbly bottom, which has been proven to be a prime YOY lobster habitat. Also we do not receive any suction sampling from the American Lobster Settlement Index, which is specifically designed to collect lobster stock data in rocky and sandy bottom conditions. The Outer Cape's bottom conditions make an excellent diverse area to test all types of data collection (mud- trawl surveys, sand – suction sampling, and cobbly/rock- ventless traps), yet we have little to no data for our zone. The Commercial Fisheries Research Foundation, an accredited third party research organization, has partnered with fishermen to collect independent, real time data on the American Lobster population. They have integrated ventless traps to monitor lobsters and Jonah crabs in all bottoms conditions and currents all the way to the far edges of our Exclusive Economic Zone. Even though we are such a small area compared to Area 1 and Area 3, not only in square nautical

miles, but as well as trap tag allocation, we encompass three different statistical areas, 514, 521 and 526. This makes the Outer Cape an ideal research area being the epicenter between George Bank, Southern New England and the Gulf Of Maine Lobster Stocks. Thus, we have a large number of migratory lobsters in our area as well as a large potential settlement area and critical habitat for juvenile lobsters.

Furthermore, the cost of living on Cape Cod is one of the highest in the Northeast, with the average cost of living being more than 40% than New Hampshire and Maine. We do not have the luxury of living in an area where unbuildable land is readily available, or built land and houses are affordable. If this proposed amendment is passed, the Outer Cape will lose over 25% of our catch due to the loss of the large lobsters over 6 ³/₄ inch or 6 inch maximum gauge, as well as the large number of "legal V-notched" lobsters that we catch. We do not fish on the quantity of lobsters, but on the weight, which created a niche market. Fishermen are first and foremost stewards of the sea and conservationists of our resource, but the proposed regulation changes do not stem from conservation; they are designed to make law enforcement easier. Each area is different from the other, hence the different regulations. This is why, due to lack of data, the only viable option is option A, Status Quo. Which allows us as the Outer Cape Management Area to invest in better research and development in our zone.

Thank you for your time and consideration.

Sam Pickard, Vice President, Outer Cape Lobstermen's Association

From:	Scott Place
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Tuesday, March 28, 2023 2:01:59 PM

To whom it may concern,

With regards to Lobster Draft Addendum XXVII

I think regulation should remain as is, unchanged, the status quo.

It's called fishing not catching for a reason. It's inherently a cyclical endeavor. I've been involved with lobstering for 25 years. Some years are better than others for our landings and the price we are paid. Some individuals don't make it in this field, some persevere.

As far as I can see, your organization is working off of flawed science at best and is quite frankly trying to fix a problem that doesn't exist, or worse, that you have fabricated.

This fishery is being squeezed by so many other entities, it certainly doesn't need uncalled for regulatory changes to the product size or trap vents on top of all the regulations we are faced with in the form of whale closures and contrivances, offshore wind projects and industrialization of the ocean.

The gauge size as well as slot limit is working. The zero tolerance female v-notch is working. Undersized females are reproducing and oversized females are reproducing exponentially. If anything the protection of lobsters over 5" carapace length throughout the Atlantic for brood stock conservation should be considered and focused on.

Please find some common sense in this matter and have the current effective regulations in the overreaching draft study remain as is and unchanged.

Sincerely, Scott Place - MA area 1 state permit, f/v Lee Faith 52 South Street Rockport, MA 01966

Sent from my iPhone

Sean Leach

433 Great Western Rd. Harwich, Ma 02645 508-292-7255 smleach1401@yahoo.com

April 1, 2023

To Whom this may concern,

I am writing this letter in regards to the Lobster Draft Addendum XXVII. I am a Outer Cape Lobsterman and State OCLMA Permit Holder #005024. I have been lobstering for over 20 years with my father and on my own boat as well. My father was a ground fisherman and lobsterman and I have witnessed the successes and failures of both fisheries first hand. Due the proper management of lobstering which was largely due to a proactive approach the fisherman in the industry we were able to build a good business in lobstering.

I regards to the current measures in Lobster Draft Addendum XXVII we would see changes to a already proven management model that was adopted and approved by both industry and fisheries management members. We have seen consistent increases in landings as well as "year of the young" lobsters over the past 30-40 years. Through these enacted measures businesses have flourished and good opportunities have been given to many individuals in our local community.

Those permit holders in the OCLMA which I am currently a permit holder in would see a larger then anticipated loss in revenue and income in a already shortened season. We only have the opportunity based on current regulations to fish from May-15th to January 31st. The harsh reality is in State waters this is actually a more of short derby style fishery which realistically gives a window to catch and sell lobsters of June 1st til mid to late November. This being the timeframe that we need to set traps which can take 2-4 weeks depending on weather and circumstances and also the 3 miles line being a true 3 miles from shore. We have no islands or land masses that can push the state line further out like in Maine.

The Economic impacts of this measures are the most glaring for fisherman in the interest of "Conservation". Lobsterman are the more considerate fisherman in regards to maintaining their resource for future harvests. We throw back all egg bearing females as well as V notch lobsters and lobsters under or oversize depending on the LMA stipulations. That being said the financial losses that come along with this Addendum far out weigh the possible gains in conservation which also has no guarantee of being beneficial to the year of the young lobsters. What I do know is the cost fuel, bait traps, boats, repairs, insurance and overall cost of maintaining our businesses has double and tripled in these categories while the price of lobster has not followed suit. Our landings are still substantial and even with these increased costs of doing business we are still somewhat profitable.

Losing "2-4 percent of gross landings" has much greater impact when expenses and cost of doing business continue to rise. Speaking to other fisherman in the OCLMA these measures more realistically could have a more closer to 8-15% gross landing drop per boat. The lack of data to support the initial 2-4% loss is startling. The landings and observation of minority segment of the LMA is dictating the impact for all. This data could be accrued in the upcoming season easily to better understand the impacts of the LMA. Depending on each boats fixed expenses some could see a NET INCOME drop in neighborhood of 15-25%, which is the real number that affects families and permit holders.

The drop in revenue and net income for the small business in a already difficult economy with 20 year high inflation and astronomical housing costs in our area could cripple already struggling families. This Addendum was brought on the heels of the Right Whale measures which have been tabled for now but will be back for discussion in the near future. Lobsterman need this opportunity to earn as much as they can now with a future that isn't all certain. We do not know what the cost to re-rig our gear will be in the future and any chance to make money could be beneficial to save for the uncertain times ahead.

I myself between the boat, permit, and traps have invested hundreds of thousands of dollars in the past few years to build my business to sustain myself and my family. This was based on the regulations in place which have made for a sustainable fishery worth investing in and also dictated the value upon the price of said business. Loans have been taken and issued by banks based on this information and at the time that decision make sense. I am not alone in this situation I have spoken to other young families who have made the same choice to enter OCLMA and have taken on this financial burden as well. With the current regulations in place we have a chance to succeed and live on Cape Cod with our families, something that is not common anymore.

There was talk at the latest meeting in Weymouth at the Sons of Italy location meeting that these bigger lobsters 6-6.75 inch carapace lobsters have minimal value. It was said that are not sold in markets regularly therefore wouldn't be a big loss. Having worked in our family fish market in years past I agree they are not the the biggest over the counter seller. That being said it is short cited to assume that retail markets on Cape Cod are the sole distributor of OCLMA lobsters. We are in a Global economy now and our unique lobsters have the ability to be shipped interstate as well as worldwide due to there quality and shell hardness for shipping. Asian cultures domestically and worldwide are the new strong buyers of American Lobster and specifically enjoy the larger size male and female lobsters which fetches a better price then over the counter in Massachusetts. To lose the opportunity to land these lobsters we only increase the marketshare of Canadian lobsters abroad and effectively give them a monopoly on these lobsters Worldwide. I don't understand why we as American harvesters and Management members of Lobsters would willingly concede marketshare to another country for a like product. To me that seems irresponsible and a improper decision for our country which has vast trade imbalance already.

I appreciate your time reading this letter and hope that it finds you well. My current recommendation is STATUS QUO for OCLMA. I also would like to take this opportunity to offer my time and boat F/V Jessica Beth to participate in any research for OCLMA to better gain information and help with your decision making process in the future.

Sincerely yours,

Sean Leach

From:	Shane Carter
To:	<u>Comments</u>
Subject:	[External] Lobster draft addendum XXVII
Date:	Friday, March 10, 2023 3:40:36 PM

I am a lobsterman from Bar harbor maine. I have been lobstering for 32 years. In that time i have seen the good as well as the bad. The measures that maine adopted before my time with v-notch protection as well as a maximum gauge have built our stocks to very healthy levels. Lobsters are always moving. Lately they have migrated toward bottom and deeper water. What concerns me is the notion that recruitment is somehow lacking. The amount of juveniles we handle and feed is as great if not greater than ever. If and when our population declines that would be the time to talk of measures to deal with it. We should have the ability in this day and age to easily deal with such a problem without putting triggers into place that may not even be necessary. As far as the options go I would support b2 and b3. This would be a good step in furthering the industry. As far as issue 2 goes i am for the status quo. I do not want asmfc attempting to fix a problem that is not there. Leave it well enough alone.

Shane carter FVEmilycatherine Bar harbor, maine

Sincerely, Shane Carter

From:	<u>MassVocals</u>
To:	<u>Comments</u>
Subject:	[External] this is massvocals
Date:	Friday, March 10, 2023 1:28:10 PM

I have a solution to the problem of lobster trapping and saving the whales

Form the rigging its time is now its simple really what we do is place a air tank on trap with each boat has its own raidio frequency locator when the boat is above the trap single is release to allow the air to fill and release into a balloon which takes a quick release and line up to boat and quick release is fasten to line and pull back to trap then hooking it to be pull up with the lobster to set the trap again you just need another air tank I give this too you long ago when sen Kerry for massachusetts was buy boats this save the whales and other wide life as well as allow the lobster to be harvest, IN Washington the court case did not place the money towards this instead they restricted fishing , if you want the plan and you want to created it anyway you wish I just sick of seeing the whales cry form being tangle up what ever I can do to help / Massvocals@comcast.net SR Drury

Sent from Mail for Windows

From:	MassVocals
To:	<u>Comments</u>
Subject:	[External] allowing lobster fishing and saving whales at same time
Date:	Friday, March 10, 2023 1:38:42 PM

Listen my maine friends the DC court issue millions of dollors as to saving the whales being that you can apply for the money as they are using the money to prohibit lobster fishing but with the tracking tarps you both get to be and whales which I know you all love will be free not bound by rigger line This will work I have tried this it works, I give the idea to union of lobster fishman Years ago nothing been done their money to be made on traps everthing . how can I help my mother form bath she too is form Maine

Massvocals@comcast.net

Sent from Mail for Windows

April 8, 2023

Atlantic States Marine Fisheries Commission Attn: Caitlin Starks 1050 N. Highland St. Suite 200A-N Arlington, VA 22201

Re: Lobster Draft Addendum XXVII

To Whom It May Concern:

Thank you for the opportunity to comment on Lobster Draft Addendum XXVII. I Stephen Pickard am a commercial lobsterman from area OCC and have been fishing there for 30 years. As it currently stands there is no data for area OCC. I feel that there should be no action taken to Addendum XXVII, and the current management measures should remain in effect for each LCMA at final approval of the addendum.

Thank you for your time,

Stephen Pickard Box 622 Wellfleet, MA 02667 uptowngirlpt@comcast.net To the Atlantic States Marine Fisheries Commission

I am writing in regards to the options for lobster stock management. First I'd like to address the attempt to standardize measurements throughout all of the management areas in state waters. I see this as a particular problem for Massachusetts in that the catches in each area vary significantly. For the purposes of my comment, though, I tried making a case for uniformity in Massachusetts. Using all of the sea sampling data in the state over the years 2002 -2021 I applied a single minimum size (84mm) and a single maximum size (127mm or 5"). I also wanted to look at the data in terms of molts so I added a 96mm (1 ½ ib) and a 110mm (2 ¼ lb) group. Twenty years of MA data on the Outer Cape Cod (OCC) area was gathered from at least 9 boats.

It is evident in **Table 1** that the OCC catch is spread out in a wider size range than are the other two MA areas. The impact of a minimum size there is smaller than other areas while the impact of the maximum size is greater. Vice versa is true for Southern New England (SNE) and Gulf of Maine (GOM). It even appears that the OCC catch may be impeded by the large catches at 84mm (1 lb) in the two other areas. The data in **Table 1** is divided into two ten year periods in order to assess changes in each area over many years.

Table 1. Annua	l average	e lobst	ers fr peri		A sea	samp	ling o	ver ten	year
		84 mm (1lb)				-	mm 4 lb)	127 mm (5 in Max)	
Area	Time Frame	F	м	F	м	F	м	F	М
Gulf of Maine	2012 - 2021	670	329	90	114	45	6	7	0.5
Gun of Manie	2002 - 2011	545	292	85	69	50	4	6	0.3
Southern New	2012 - 2021	493	125	35	25	2	2	0.3	0
England	2002 - 2011	553	114	49	14	6	0.6	0.4	0
Outer Cape	2012 - 2021	85	40	155	133	91	23	30	6
Cod	2002 - 2011	61	47	93	80	77	21	21	3

A particular unexpected observation from the data is the quantity of females compared to the quantity of males. **Table 2** adds more information to this.

Table 2. Percent egg - bearers In MA areas within ten year periods

	Gulf of Maine		So. New England		Outer Cape Cod	
Time Frame	Sublegal Egger %	Legal Egger %	Sublegal Egger %	Legal Egger %	Sublegal Egger %	Legal Egger %
2012 - 2021	13.4	20	20.2	20.4	19.2	41
2002 - 2011	10.2	15	27.4	24.8	16.4	42.4

The OCC area has approximately double the percentage of legal size egg-bearing lobsters in its population. It does not seem to me to be the problem if it has better than 40% eggers in its catch.

The comparative results of a uniform lobster regulation for all of Massachusetts indicate that it could not work without local problems.

In addition to the stock assessment is the economic impact to the OCC area. In **Table 3** I looked at the catch in the over 5" maximum size according to MA sea sampling between 2002 -2021. Since SNE had virtually none in that size I only used GOM and OCC data.

Table 3. Greater than 5" lobsters in MA sea sampling 2002 - 2021

	Gulf of Maine		Outer Cape Cod	
	F	M	F	M
3 lbs	524	32	2417	467
4 lbs	386	31	2331	444
5 ibs	108	17	909	216
6+ Ibs	68	17	561	240
Total	1086	97	6218	1367

The quantity of 5"+ lobsters in the OCC compared to GOM is so significant that the economic impact does not warrant a one - measure for all regulation policy. Also the male lobster numbers in the GOM indicate there isn't much left after the catch below 5" anyways.

The following weigh out sheet is a sample from one lobster wholesaler. The value of a lobster increases in respect to size and quality (hardshell, firmshell, processor aka softs). The economic impact report needs to take this into account when calculating financial loss.

ODE	PPODUCT		NW DEAL
LBC	PRODUCT CHIX- HARD	PRICE	
LBQ	1/4 - HARD	6.75	
LBH	1/2 - HARD	7.00	
LB2	2 - 2.5 - HARD	7.75	
B2.5		10.00	
LB3	2.5-3 - HARD	9.25	
	3 to 4's - HARD	9.00	1
LB3	4 to 6's - HARD	9.00	
LB6	6 & UP HARD	8.00	
BSC	SMALL CULLS HARD	5.75	
BCU	LARGE 2+ CULLS HARD	6.50	
BFR	FIRM U/2	5.00	
BFL	FIRM 2+	5.25	
LBP	PROCESSOR	3.75	S.V
and the second		0.00	
HLFF	1/2'S - FIRM		
3/4F	3/4 - FIRM		
B2F	2-3'S - FIRM		
B3F	3-4'S - FIRM		
B4F	4-6 FIRM		1.5.2
IUMF	6+ FIRM		
	DEAD DISCARD	0.00	N.
	TOTAL CULLED WEIGHT		
	SHRINK PERCENTAGE		
6 6 6 9 3			
A DESCRIPTION OF THE PARTY OF T	indian and an an an and the second and the subliment	HARLE AUGUST	anit.

Summary: If the ASMFC needs more egg production from the lobster stock there are plenty of eggers in count in the GOM 84mm (1 lb) group in **Table 1** which could be protected with a minimum size increase Furthermore there isn't a loss in catch weight since those remaining lobsters become $1\frac{1}{2}$ lb lobsters after molting. Fishermen get a return on a minimum size increase. Maximum size is a direct financial loss to fishermen. The only gain is that those few remaining might produce more small lobsters in a future catch. The MA data however indicates that the pattern of $1 - 1\frac{1}{2}$ lb GOM exploitation will continue since there isn't any real trap reduction. In fact, the GOM can increase their trap effort. The proposed plan would be a risky gamble which would threaten OCC businesses.

I am only able to endorse **Option A: Status Quo.** Twenty years ago the OCC fishermen put in place effort reduction measures with strict trap transfer requirements which have reduced traps in the area. The minimum size was increased. The data indicates a solid lobster resource in the OCC area. The ASMFC needs to eliminate v-notching and maximum size as ineffective and unprovable management tools. I suggest that the ASMFC copy the OCC plan.

Stephen Smith

Orleans MA

From:	Steve Budrow	
To:	<u>Comments</u>	
Cc:	budrowfishinginc@gmail.com	
Subject:	[External] Lobster Draft Addendum XXVII - Comment	
Date:	Saturday, April 8, 2023 9:12:06 PM	

To Whom It May Concern,

Draft Addendum XXVII to Amendment 3 to the American Lobster Fishery Management Plan (Addendum) makes very little sense to me in terms of conservation efforts for the stock and sustainability for our fishery. I am a MA/EEZ LMA1 lobsterman from Massachusetts who has built my life around preserving and responsibly fishing the American Lobster. If warranted, a gauge increase may support that preservation, but to allow the taking of v-notches in LMA1 under the guise of conservation is criminal and entirely counterproductive to our sustainability efforts. For Addendum Issue 1 Options, ASMFC cites 'consistency' for v-notches, but only for 1/8-inch. There should be an option for consistency across all management areas for zero-tolerance, which is what I believe needs to be done to continue to preserve the entire American lobster fishery, as LMA lines do not truly exist for the GOM/GBK stock. At the very least, maintain zero-tolerance for all of state/EEZ LMA1.

For the last 20 years we have protected these breeding females to sustain our reproducing stock, the very stock ASMFC should also be protecting. How/why are we even discussing the taking of these females? An 1/8-inch v-notch may not seem like much to you, however, as a fisherman, I am telling you for the amount of females I throw back with this size v, it would do significant damage to the LMA1 and entire lobster population if allowed to be taken - take what I throw back times the amount others throw back throughout MA, NH, and ME – that's what you need to imagine, not just an 1/8-inch v-notch. There are fishing areas we currently avoid because they are thick with v-notched females and we avoid them because it is not profitable fishing, but if you legalize this segment of the population, they will be targeted. These include the 3 to 5 lb reproducing females. We know these lobsters produce twice the eggs than those of a smaller (1.5lb) lobster, and their eggs also have a higher survival rate, so why would we want to start taking that portion of the brood stock? If ASMFC truly wants to protect the reproducing stock, they need to take a hard look at adopting a zero-tolerance regulation across all of the LMAs. The stocks mix, contrary to neat LMA lines. LMA1 boats fish alongside LMA3 boats, and the same goes for the Outer Cape. LMA1 has a higher conservation yield under zero-tolerance with a 5-inch gauge maximum than LMA3 and OCC who are allowed to take known reproducing females (v-notches). LMA1 should be the model for conservation, not LMA3 or OCC.

Zero-tolerance across all LMAs would also support and strengthen enforcement efforts. No v-notches period! If a warden walks into a fish house or a retail store and there are v-notches on the premises, it's an offense for the dealer/retailer. Currently this is an issue for whose offense is it: fisherman or dealer and law enforcement has to prove which boat it came from. Having a zero-tolerance regulation would take away the dirty practices of buying illegally caught v-notches from (current) zero-tolerance LMAs and strengthen our market. The LMA1 boats of Maine, New Hampshire and Massachusetts have made this work, and work well for 20 years now. I personally feel that the Outer Cape and LMA3 boats should be allowed to keep their current oversized gauge and no longer be allowed to take v-notches in place of that. The LMA3 and OCC fisheries are based on a bigger lobster that we (LMA1) frankly don't really see, or don't rely on. From a fisherman's standpoint you'd be able to keep the landings strong in all management areas adopting a zero-tolerance v-notch policy and making no or a minimal change in the oversized gauge for LMAs 3 and OCC.

Marketability:

Allowing LMA1 to keep the 3.25-inch minimum size would help the marketability of US-caught lobsters. We need to stay competitive in the worldwide 'chicken' market. Canada has a smaller minimum gauge size than the US and would own the entire chicken market around the globe if we increase that LMA1 gauge size. This would devalue our US-caught lobsters and pigeonhole us into a small portion of the Global market, making us virtually noncompetitive against our Canadian counterparts. A chicken lobster is the desired size for your average dinner plate lobster all over the world. The giant lobsters caught in the Outer Cape and Georges Bank may be impressive to see, but they are very hard to move in the Global marketplace a good portion of the year.

Stock Strength and Sampling:

Based on the Zoom discussion/presentation I attended, I have concerns about the strength of current data practices for stock assessments, especially knowing that this is the foundation for your decision-making/gauge triggers. I strongly feel that station and at-sea sampling lack confident data in all LMAs and needs to be reassessed based on better data. How can we get a clear picture of what is really going on with our stock the way sampling is currently conducted? Right now, there is zero incentive for vessels to take at-sea samplers so the boats that do take samplers are not selected at random the way they should be. Rather, samplers target the boats willing to take samplers, so samplers use the same boats every time instead of finding new boats. Because the same boats are at-sea sampled over and over, fishing the same general area over and over, and only able to sample in MA waters and not EEZ (for MA sampling), there is an extremely poor representation of catch and the ability to catch lobsters in LMA1. Not only are lobsters migratory, but they are extremely sensitive to changes in their environment. Cold water, fresh water, warm water, seaweed, predators, chemicals, oxygen, PH balances, storm surges, tide cycles, moon cycles - no 2 years are the same, and these are just a handful of examples that affect a lobster's habitat every day. If you don't move locations at random by sampling with different fishermen, how would you know what's really taking place overall? I have seen the body of lobsters migrate 8 miles over the course of 5 days. It comes down to a simple case of here today, gone tomorrow. We would benefit far better from a random sampling group over a much larger range than the current program allows.

Massachusetts restricts their at-sea sampling to State waters only. When a sampling boat goes just beyond the state territorial line during a sampling trip, the samplers stop sampling and what if the body of lobsters is just over the line in EEZ that day?

No one on the policy side has that information. Zero samples are taken in EEZ waters, no information is recorded from those lobsters, and there's a huge data gap that could otherwise paint a much clearer and important picture of what's happening at that time. I know, because I have taken at-sea samplers from DMF.

The suction sampling in MA waters has also been cut down by DMF's own admission due to the presence of White sharks in some areas. Even a nonscientific person could see this as a real problem going forward because of the critical recruitment and young of year numbers it gave to the stock assessments, especially if years with less suction sampling are compared to years with normal suction sampling. It's also one less piece of a much bigger picture in LMA1 that we are now missing.

Trap surveys and trawl surveys can only tell you so much due to their limitations and their great variability. When catch is recorded from the ventless surveys, the bait type, moon phase, water temp, days' soak, habitat, etc. are all extremely variable – in fact, only the stations are relatively the same year after year. Because boats pay for their own bait instead of DMF supplying the bait, participating boats may use cheaper or less bait per trap. Ventless traps are also hauled at a significantly longer soak time (couple times a month) than the average lobsterman (couple times a week), which is not a good representation of life in the area because a full trap will no longer 'catch' (long soak) and neither will an empty one (void of bait/poor quality bait). The scientists in charge of these surveys should better acquaint themselves with the current fishery and use the standards of the fishery to create their surveys. If each ventless boat used the same bait, same amount of bait, hauled on a shorter soak, and were not allowed to survey known dead zones, which is a much closer picture of our actual fishery/catch, then I could find better value in the ventless surveys. I understand scientists want to standardize their tests or surveys, however the stagnant stations, allowed variability, and the lack of current fishing practices/habitat are not taken into account as the environment is ever changing and so are the lobsters we are trying to forecast with very limited means. At-Sea Sampling would open the door for a greater understanding over a much vaster expanse of the ocean with relative ease. In my personal opinion, collaboration between the lobster fleet and scientists is a key factor to have the strongest data possible. The scientific data tells a small portion in a limited amount of time and area, a fisherman can tell the story over a massive area and thousands of hours at sea hauling traps every year. Because of the concerns I have over the data used for the stock assessments, for Addendum Issue 2, it has to be status quo. The trigger mechanism is based on an incomplete picture. Also, for the person sitting behind the desk who has never built a trap or fished one, it is extremely time-consuming and costly to change out hundreds of vents, especially for those of us whose trap wire incorporates the vents into the build - it is not an easy alteration.

Thank you for your time and consideration of my comments. Steve Budrow Rockport, MA

From:	Thomas Bell
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Friday, March 31, 2023 10:02:40 AM

Some of my quick thoughts and opinions on this draft addendum:

1) The starting point for the trigger mechanism should be an averaged sample size over at least 5 or 10 years rather than starting from the height of the 2016-2018 average. And if the trigger mechanism is used at all it should be a decline of the greater percentage.

2) Far more predation research should be conducted to see what effect predators may be having on lobster recruitment. I know the consensus in scientific communities is that cod and other lobster predators have low numbers across LCMA 1 and 3 but fishermen are starting to tell a different story. In my personal experience, cod in particular seem to be making a radical comeback and I have never seen the amount of cod in my life as I have in the past couple years. This research should not only be focused on cod but other predators as well. It should also be noted that low recruitment numbers have lined up well with halibut fishermen not being able to fish in federal waters.

3) If any changes are made to gauge sizes, Canadian lobster outside of those sizes should not be allowed to be sold in the US. Canadians should not be allowed to send their product here, undermining the conservation we are trying to accomplish and gearing the marketplace towards their product in the process.

4) Trawl and ventless trap surveys should be conducted in far deeper water than they are currently. It is clear that a larger percentage of the lobster biomass seems to be staying further offshore in recent years. It would make sense if smaller lobsters are as well.

5) LCMA's overall should have much more parody with LCMA's that already have stricter gauge, vent, and V-notch requirements. Particularly in V-notching all egged lobster, zero tolerance V-notches, and much closer to parody in max gauge sizes.

Thank you.

Sincerely,

Thomas W. Bell B.S. Maine Maritime Academy '14 Vessel Operations & Technology 454 South Gouldsboro Road Gouldsboro, ME 04607 (207) 479-1720 thomas.bell1280@gmail.com

From:	Timothy Holmes
To:	<u>Comments</u>
Subject:	[External] Lobster Draft Addendum XXVII
Date:	Wednesday, March 8, 2023 6:20:18 PM

My name is Tim Holmes, I am a lobsterman in Massachusetts.

I would like to start off by saying that I am opposed to this Addendum as written but am not opposed to conserving the lobster stock, and a trigger mechanism makes sense if it is implemented using the correct data. I have 3 major issues with this draft as written.

1) The benchmark set in Addendum XXVII only uses an average of the highest 3 years EVER on record. These three years should be considered outliers if anything and it would make more sense to disallow them from the average. In order to have an accurate average many more years should be factored in to find a benchmark. No draft should move forward without an adjustment to the number of years in the average.

2) If the gauge is increased to 3 3/8 the lobsters allowed to be imported to the USA must also be 3 3/8 and southern Atlantic Canada must also have a gauge increase to 3 3/8. Lobsters in the Gulf of Maine migrate into Canada waters and therefore our smaller lobsters will still be caught, but by Canada and then sold back into our market. If studies have not been done to take into account the impact this will have on the US lobstermen market then they must be done before anything is implemented. I fish out of Boston and we are primarily a small chicken lobster fishery, this gauge increase will be devastating to all those who fish MA state waters inside of Massachusetts Bay.

3) The whale regulations that will be implemented in the next couple of years will have a huge effect on the lobster stock due to reduced effort caused by trap reductions and massive area closures. It does not seem that any of these new regulations have been factored into this draft. There must be a pause in any new regulations on the lobster fishery until we know the significance of the new whale regulations.

Also I would like to point out that I believe the age used that a lobster is believed to be at maturity is far off by my observations on the water. Possibly more studies should be done at current water temperatures to get a more accurate age of maturity.

The American Lobster in the Gulf of Maine is NOT overfished, and overfishing is not occuring.

I hope my comments along with all the others who oppose this draft addendum are taken into account and the necessary changes are made before the commision puts a huge financial burden on an already struggling industry. Thank you.

Regards, Tim Holmes To ASMFC in response to Lobster Addendum XXVII:

Hello, my name is Tom Luce. The past 3 years I've been an OCLMA lobsterman and have been commercial fishing full time since 1987.

I'm against any standardization of the lobster management areas. Each LMA is different, distinct and unique in its own aspects. To name a few, the lobster sizes, lobster quality, their patterns, behaviors, the traps designs and migration timelines all vary. They all need be managed separately and in cooperation, with regard and respect to the fishermen's knowledge who work within these LMA zones.

The Lobster Addendum was noted during the Massachusetts webinar of the tremendous time and effort devoted compiling all the survey research and the accompanying data. Addendum XXVII was referred to as robust and heavily peer reviewed. And I'm sure the lobstermen are appreciative of the work commitment compiling all the research and data. But it's hard to label this study as robust when it is incomplete. The research/surveying of the Outer Cape Cod Lobster Management Area was neglected. Reasons for the lack of research were cited as unfavorable logistical conditions such as tidal and bottom composition difficulties. Also, financial concerns were mentioned as a reason for the sparse research in OCLMA. The truth of the matter is the only significant financial concern is once again potentially resting on the fishermen's shoulders. This couldn't have come at a worse time. The lobster industry is being heavily pressured and financially stressed to confront and resolve the Right Whale issue. Added pressure from the Renewable Wind Energy Industry with the future environmental impacts from the effect of wind turbines on the marine ecosystem. Also, the recent planning (initially approved and permitted by the EPA) of dumping radioactive waste out into Cape Cod Bay and its cumulative effect. And currently, the most financial concern to the fishermen is the recent rise of diesel fuel prices and its inflationary effect on supplies, equipment and labor expenses. Our current government administration's push on renewable energy is to the detriment of small businesses who use and depend on diesel fuel to power heavy equipment such as fishermen and farmers or other industries that work with raw materials at the wholesale level. Inflation generally lowers wholesale market prices at the dock due to the drop in demand. Yet, we have to endure the higher operating costs due to inflation (we can not pass these costs on to the consumer). We lose on both ends-lower market prices/higher expenses to operate.

For these reasons, I see a upcoming decline in lobster fishing effort. It is becoming more and more difficult to turn an end of the season profit.

For these concerns and many others not mentioned but highlighted by other lobstermen, I believe Option A-Status Quo is the best choice at this time.

Thank you for your time and consideration.

Tom Luce F/V Sea Win OCLMA

From:	Walter Willey
To:	<u>Comments</u>
Subject:	[External] Vents, gauge increase
Date:	Monday, March 6, 2023 2:01:30 PM

My name is Walter WilleyIV I fish Criehaven Island. I don't agree with the gauge increase,but I can live with it. But I strongly disagree with the vent increase. Because a few yrs ago, I had a crab vent in the door. Had 2. 1-7/8vents on the side's. My catch dropped off by 20 percent. So the next season I took out one of the 1-7/8 out and my catch pick up again. We are already having counters going out of the vents now, !! Thank you Sonny Willey Sent from my iPhone



Hello, my name is Tom Luce. The past 3 years I've been an OCLMA lobsterman and have been commercial fishing full time since 1987.

I'm against any standardization of the lobster management areas. Each LMA is different, distinct and unique in its own aspects. To name a few, the lobster sizes, lobster quality, their patterns, behaviors, the traps designs and migration timelines all vary. They all need be managed separately and in cooperation, with regard and respect to the fishermen's knowledge who work within these LMA zones.

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For these reasons, I see a upcoming decline in lobster fishing effort. It is becoming more and more difficult to turn an end of the season profit.

For these concerns and many others not mentioned but highlighted by other lobstermen, I believe Option A-Status Quo is the best choice at this time. Thank you for your time and consideration.

Tom Luce weeter and the second s nstable, MA 02668 AGE PAID RNSTABLE, MA 7021 2720 0002 1077 4626 UNITED STATES SEIVIED **RDC 99** 22201 **{ 1 8 2023** R2305M144470-08 Caitlin Starks Atlantic States Marine Fisheries Commission 1,050 N. Highland St. Suite 200A-N 10266 Ali me.



Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201 703.842.0740 • 703.842.0741 (fax) • www.asmfc.org

MEMORANDUM

- TO: American Lobster Management Board
- FROM: American Lobster Advisory Panel

DATE: April 12, 2022

SUBJECT: Advisory Panel Report on Lobster Draft Addendum XXVII

The American Lobster Advisory Panel (AP) met via webinar on Monday, April 10th, 2023. The purpose of the meeting was to review Draft Addendum XXVII to Amendment 3 to the American Lobster Fishery Management Plan and to gather input from the lobster advisors on the proposed management options. The addendum considers measures for Lobster Conservation and Management Area (LCMA) 1, 3 and the Outer Cape Cod (OCC) area to increase protection of the Gulf of Maine/Georges Bank (GOM/GBK) spawning stock. Addendum XXVII also considers options to modify some management measures upon final approval of the Addendum to achieve more consistency in measures within and across LCMAs. Staff provided an overview of the proposed options and summarized the public comments received on the Draft Addendum.

Lobster AP Attendance

Grant Moore (Chair, MA) Jon Carter (ME) Jeff Putnam (ME) Chris Welch (ME) Eben Wilson (ME) Robert Nudd (NH) John Whittaker (CT) Arthur (Sooky) Sawyer (MA) Todd Alger (MA) Eric Lorentzen (MA)

The following is a summary of the AP discussion. Comments provided by AP members do not represent consensus opinions but rather individual perspectives.

Summary

AP members provided input on which of the proposed options they support and why. There was not consensus among the advisors on a preferred set of management options. However, there were several issues that the advisors agreed on. First, the advisors in attendance expressed a desire to look after the lobster resource. In particular, they agreed that the v-notch regulations have had a positive impact on the stock, and would support the standardization of v-notch definition across LCMAs. However, a number of advisors urged the Board to consider implementing a standard definition of zero-tolerance, rather than the proposed standard of 1/8" with or without setal hairs, because it would have a greater conservation value and would not significantly impact the industry.

The advisors also agreed that they want to see the lobster resource looked after. Several advisors stated that they do not want to see similar situation to Southern New England (SNE) occur in the GOM/GBK stock, and that they want to see something in place to protect the stock. However, the general sentiment among the advisors is that the current stock condition is still good and does not necessitate immediate action. Several advisors thought the declines in the surveys may be because more lobsters seem to be moving to deeper water, and those areas are not adequately sampled by the surveys.

The advisors also all expressed concerns about the economic market consequences of the proposed increase to the LCMA minimum gauge size. Many stated that allowing lobster imports from Canada that are smaller than the LCMA 1 minimum gauge size would greatly disadvantage the US fishery. Several called for a market analysis to be performed before considering this change.

Under Issue 1, five of the advisors supported Option B, with sub-option B3 (standard v-notch possession definition for LCMAs 1, 3, and OCC) but three of those advisors advocated for a zero-tolerance definition. One advisor also supported sub-options B1 (standardization within LCMAs), B2 (mandatory v-notching), and B4 (initial trap tag allowance equal to allocation).

Under Issue 2, five advisors supported status quo, arguing that more information is needed before making a decision given the proposed options would negatively impact the industry. Two advisors expressed that they are torn between the options, recognizing that the trends in recruitment are concerning and that waiting too long to take action could be dangerous. When asked which of the proposed approaches (other than status quo) under Issue 2 is preferred, the majority preferred the trigger mechanism to scheduled changes to the management measures. One person preferred scheduled changes to the measures because it would give them time to prepare for the change.

Comments on Addendum Options

Individual comments provided by advisors are summarized below.

Eben Wilson, LCMA 1: Expressed that he understands why we need to raise the minimium size, but is not excited about it. From the LCMA 1 perspective in GOM, protecting larger lobster is a huge benefit because they can produce so many more eggs. He participated in research with David Wahle, related to testing the energy in the eggs of lobsters of different sizes. The paper is not yet published but they did find that the bang for the buck is in the bigger lobsters. He also noted that v-notching is the best sustainable practice in the fishery and it is important to ensure that the bigger eggers stay out there.

Chris Welch, LCMA 1, Maine Zone G: He has participated in surveys and sea sampling, and it seems that Zone G is improving as far as biomass and data compared to rest of the state. The surveys and landings have both been increasing. They are also seeing tons of small and egged out lobsters. A lot of the lobsters they are catching now are not in the same places as 10 years

ago, yet surveys continue to be in the same areas. He is concerned that if the lobsters have moved, then surveys might not be catching that. He is In favor of status quo, but would prefer the trigger mechanism of the other options, as he is not seeing an issue in his area.

Todd Alger, SCUBA Diver: Because he is not making a living at this, he does not have the same outlook or involvement as the other advisors, but from his outside perspective, it makes sense that each area has different gauge preferences. He understands why folks want status quo and thinks that is probably ok right now. The trigger reference is based on the highest years of data, so if you go down from the highest point that is probably ok. He also noted that he sees many more sea bass than there used to be in the Boston harbor and Cape Ann areas, much more than five years ago.

Sooky Sawyer, Gloucester, MA: He is part of the Massachusetts Lobstermen's Association. He noted that MA already has a four-month closure, and more time is needed to see how that is going to play out before moving forward with this Addendum. Therefore he supports Status Quo.

John Whittaker: Because he fishes out of CT, he does not want to comment on the addendum specifically. He did state that there continues to be a small fishery in SNE, and they still want to be part of the advisory panel process.

Jeff Putnam, LCMA1: Has always had respect for the science group in ME that does the surveys. Their data means a lot to him and he trust its. He does not think we can sustain this level of fishery catch forever, so it makes sense we would eventually see a drop in catch. However, the decrease in juveniles is concerning. The objective of the addendum makes a lot of sense and we should be doing something to help the spawning stock biomass, but he does not think the process has been fully thought through, especially when it comes to the Canadian import issue. As written, that would be a big issue for the fishery. It is also an issue that some areas throw back v-notched lobster, and then they can just be caught in other areas. If the Commission wants to protect SSB it should implement a zero-tolerance definition for the v-notch for all aeras. He supports the increase in the minimum gauge in conjunction with v-notching rules.

Jon Carter, LCMT Area 1 Chairman: Having been on the LCMT for a long time, he knows the LCMT worked hard with scientific community to come up with the management plans. They developed options for measures that could be taken if something needs to happen to protect the stock, btu they never talked about increasing the minimum gauge size in LCMA 1. He also noted that the discussions were always about the maximum gauge size because the larger lobsters have many more eggs that are better quality. They did not used to see small lobsters egging out like they are now, but the quality of those eggs is inferior. He believes the zero-tolerance v-notch definition and protecting female lobsters is the way to go, and is baffled by the proposal to increase the minimum size. He noted that he tried to organize an LCMT 1 meeting, but was shot down by the Commissioner. He has questions about the way they are sampling for lobster, since the lobsters are moving offshore, and the science has not accounted for that. He does not think it makes sense that there would be less habitat in deeper water

because he has talked to many others that are seeing more settlement in deeper water. He thinks this addendum is really just about standardizing the minimum gauge size. He emphasized that this would make the US fishery less competitive than Canada because they would lose the market for the 3-inch tails that come from chick lobsters. If Canada also increases their min measure, then he could support this increase, but if we do and Canada doesn't, we will be disadvantaged. Stated that the LCMTs need to meet to discuss this. Not having an LCMT meeting goes against the process that was established for the LCMAs. He also thinks market issues need to be considered, and the LCMTs could have weighed in on that issue. For now he supports status quo.

Bobby Nudd: Related to Issue 1, he supports option B to implement some changes at the approval of the addendum. He supports sub-option B1, because it is a problem that some people in the same area can catch lobsters that others have to throw back. The v-notch definition without setal hairs is not useful because they grow back and then the lobster could be kept. He also supports sub-option B2, for mandatory v-notching because there is no reason not to notch. He attended three hearings (ME, NH and MA) and it seemed that at all of those hearings everyone spoke in support of a zero tolerance definition for the v-notch. He also fully supports sub-option B4, saying that it is very important. Environmentally, we need to be more responsible for lost and derelict gear. Reporting the gear loss in order to get a replacement tag is an important step toward this. Having extra tags also allows people to fish over their trap allocations. In NH, he says the NGOs are demonizing the lobster fishery because of lost gear and the environmental impacts. He thinks we should take any step we can toward minimizing this issue.

On Issue 2, he is really torn. He stated that as a group, the AP has a two-fold duty. The advisors represent the fishermen in their state, but they are responsible to the resource also. Without a healthy resource there are no fishermen and no future generations. He is very nervous about what happened in Long Island Sound, even though it was attributed to water quality issues. After reading a lot and talking with the biologists, they were very convincing about the quality the data to substantiate the need for this addendum. He knows a lot of NH, ME, and MA fishermen want status quo, but thinks we need to give a lot of thought to the resource and what could happen if we don't do anything, or if we do something but it is too late. He thinks the biggest thing of importance is to start taking care of the lost traps.

Grant Moore, LCMA 3: There have been over eight regulatory actions in the last 15 years. In LCMA3 and OCC, the fishery relies heavily on larger lobster. They used to catch unlimited large sizes, then went to a 7" maximum, and 6 $\frac{3}{4}$ " maximum. He recommends controlling the catch through ring sizes. A decrease to the maximum gauge sizes would not be tolerable by the industry and is a huge concern. He agrees about standardizing the v-notch definition for all LCMAs. Mandatory v-notching is hard to enforce, but standardizing the definition would be a big step. On Issue 2, he is also torn about the options. He thinks about the SNE collapse, and that there was an increase in effort anyway. He does want to see something in place to protect the stock, but thinks the trigger mechanism needs to be thought out further.

Eric Lorentzen: Supports status quo for now. This seems to be moving too quickly. The whale rules in 6 years will be positive for the lobster stock. Also, the proposed measures in this addendum would put the US fishery inside a box, while Canada would be able to take both smaller and larger lobsters and process them and import them to the US.

ASMFC American Lobster Management Program Operating Procedures

Revised November 2002

BACKGROUND

The Lobster Board is responsible for implementation of the lobster management program and is accountable to the States, Policy Board and the Commission for successfully implementing the Fishery Management Plan (FMP). The supporting committees provide input to the Board to ensure that management decisions are informed and based on sound science. This document outlines the purpose and composition of the various lobster committees. The description of each committee is taken directly from the Interstate Fishery Management Program (ISFMP) Charter and/or Amendment 3.

PURPOSE

To promote transparent and efficient American lobster management program operations.

OPERATION OF ADVISORY BODIES

The supporting lobster committees primarily draw upon the resources of agency staff members, universities, and lobster industry representatives for information and advice on the lobster fishery. Input from the various advisory bodies assists the Board in making management decisions. The most constructive and productive way for advisory bodies to assist the Board and support the management program is through consensus recommendations. It is strongly recommended that votes not be taken at the advisory body level. All efforts should be made for the group to reach consensus. Where consensus is not possible, the group should document the different points of view and justification for the differences.

BOARD MEMBER RESPONSIBILITIES

Each Board member needs to keep tabs on how the supporting committees are doing, and especially how their respective representatives are functioning. Communication, both formal and informal, between the Board and supporting committees is critical for an efficient and effective management program.

TECHNICAL COMMITTEE (TC)

Description - The Technical Committee is composed of experts in scientific and technical matters relating to the lobster stocks. The Committee is appointed and convened by the Lobster Board to provide scientific and technical advice in the process of developing and monitoring the FMP.

Composition - The Technical Committee shall be composed of one member per active

state/federal agency on the Lobster Board. A state may designate a proxy to participate in the absence of the committee member, however the Commission will only reimburse travel for one member per agency.

Sub-committees - The Technical Committee Chair, in consultation with the Board Chair, will recruit/designate special expertise, as appropriate, for Technical Committee deliberations on specific issues, including a subcommittee on economics and social sciences. All sub-committees of the Technical Committee shall report to the Technical Committee.

Leadership - The Technical Committee shall elect a Chair and Vice-Chair from among the members who are willing and able to commit the time and energy required by the job. The role of the Chair is very demanding. The Chair should be willing to do the job and state agencies must be willing to provide the Chair time to attend to TC business. The Chair should attend all Board meetings. The Chair will be in frequent contact with the FMP Coordinator

All requests for Technical Committee analyses and evaluations should be coordinated through the Chair.

The Vice-Chair of the Technical Committee shall prepare a summary after every meeting to be distributed to the Board, Technical Committee and Advisory Panel.

STOCK ASSESSMENT COMMITTEE (SAC)

Description - The Stock Assessment Subcommittee is a group of experts in fish population dynamics and is appointed and convened by the Technical Committee, as a standing committee, to prepare a stock assessment. The SAC is responsible for data analysis and preliminary preparation of a stock assessment report.

The SASC shall report back to the Technical Committee for review and evaluation of work.

Composition - The SAC shall consist of a maximum of 6 members and membership should be comprised entirely of expertise in stock assessment and fishery population dynamics. It is important to preserve a diversity of scientific viewpoints, while assuring that each SAC member has experience in stock assessment/population dynamics. The TC Chair or Vice-Chair will serve as an ex-officio member of the SAC

The Technical Committee shall identify SAC membership for Board acceptance. Membership to the SAC shall not be limited to Technical Committee members.

Leadership - The SAC shall elect a Chair from within its membership who is willing and able to commit the time and energy required by the job. The Chair will be in frequent contact with the FMP Coordinator.

Based on experience, it is possible that a candidate Chair may not step forward under these circumstances. In this case, the Board should consider:

1. A request to agency representatives who should confer with their committee members and

identify a person to be made available to assume the job, or

2. Board engage an independent person with appropriate credentials to step in as Chair.

ADVISORY PANEL (AP)

Description - The Advisory Panel is a group of people involved in the lobster fishery and are appointed and convened by the Lobster Board. The purpose of the AP is to advise the Board in the development and monitoring of the lobster management program. The AP traditionally has taken a coastwide approach to issues. The AP provides overall advice to the Board on all aspects of the management program (i.e. reference points, non-trap gear, whale interaction). In contrast, the LCMTs focus on area management only. The AP may examine, based on coastwide industry concerns, issues that emerge from individual or multiple lobster management areas which have implications in other management areas. For example, the AP may be directed by the Board to comment on the impact of implementing a gauge increase in multiple areas on different time schedules. The AP would be requested to provide comments to the Board. Meeting arrangements and staff support shall be provided by the Commission.

Leadership - A Chair and Vice-Chair should be elected and serve for a two-year term, as designated in the ASMFC Advisory Committee Charter

Composition - Industry input to lobster management program is unique with two advisory groups - the Advisory Panel and the Lobster Conservation Management Teams (LCMT). The LCMTs provide additional industry representatives focusing on local management issues. Therefore a large Advisory Panel is no longer necessary.

The Advisory Panel membership shall be reconstituted, through attrition. The new membership shall be comprised of four representatives from the states of Maine and Massachusetts, two representatives from the states of New Hampshire, Rhode Island, Connecticut, New York, and New Jersey. States may appoint advisory panel members who are also members of LCMTs. In such cases, the State's Board members need to clearly communicate to the advisors the different roles they are serving, and the distinction between the role of a coastwide advisor and an LCMT member.

Advisors shall serve a term of four years, in accordance with the Advisory Committee Charter, and may be re-appointed. However, a State may not re-appoint more than the new limits on membership.

The AP process can demand a large amount of time and it is important to have members that are willing to participate.

LOBSTER CONSERVATION MANAGEMENT TEAMS (LCMT)

Description - The Lobster Conservation Management Teams were created through Amendment 3 for each of the seven lobster management areas. The LCMTs are appointed and convened by the Lobster Board to advise the Board on each management area and recommend changes to the

management program. The lobster FMP identifies goals, objectives and a rebuilding schedule. The LCMTs provide recommendations for management measures that will accomplish the goals of the FMP while taking into consideration local fishing practices. For example, the LCMTs recommended trap limits, area closures, limits on vessel upgrades, gauge increases and vent size increases to limit effort and meet egg production goals. The LCMTs do not make recommendations on coastwide issues.

Meeting arrangements and staff support is provided by the states.

Process for Submitting Management Area Recommendations/Proposals – LCMTs and the jurisdictions adjacent to the area of concern shall be responsible for the development of recommendations for each lobster management area. Adjacent jurisdictions will be responsible for preparing a management proposal containing said recommendations. Concerns regarding conservation, enforcement, administration, and socio-economic implications should be addressed during this time period. Upon finalization of the management proposal, the area/state contact for each LCMT will forward the proposal to Commission staff for distribution to and review by the Lobster Management Board. Upon receipt of the proposal or during the next scheduled lobster Board meeting, the Board will take action on the management area proposal.

Composition - Amendment 3 identifies a minimum number of LCMT members and the states involved with the selection of members (see table on the next page). The LCMT process can demand a large amount of time and it is important to have members that are willing to participate.

Area	Minimum number of members	States involved in selection of members
1	15	ME, NH, MA
2	10	MA, RI, CT, NY
3	10	ME, NH, MA, RI, CT, NY, NJ, DE, MD, VA, NC
4	7	NY, NJ
5	7	NJ, DE, MD, VA, NC
6	6	CT, NY
OCLMA	. 3	MA

State personnel, including representatives from the Technical Committee, are expected to staff meetings of the LCMTs. The states should keep the Commission informed of all meetings and provide meeting summaries/minutes for all LCMT meetings.

Leadership - Each LCMT shall elect a Chair and Vice-Chair. The Commission will reimburse the Chairs of each LCMT for travel expenses to Lobster Board meetings only. The Chairs must represent the view of the LCMTs at Board meetings, not the views of the individual, state or the associations to which they belong. The state may choose to appoint a LCMT chair or other member to the AP. At AP meetings, such LCMT members would be expected to represent their personal views and/or those of industry associations or segments to which they belong. In addition, a state contact person and technical advisor shall be appointed to each LCMT.

PLAN REVIEW TEAM (PRT)

Description - The Plan Review Team is a group of individuals who are knowledgeable concerning scientific facts, stock and fishery condition, and fishery management issues concerning the lobster stocks. The Lobster Board appoints and convenes the PRT for the purpose of conducting an annual plan review for the FMP. Consistent with applicable schedules and compliance provisions of the FMP and its addenda, the PRT will conduct a review of the stock status and states' compliance with the implementation requirements of the FMP. The PRT should function in a manner that produces the work requested by the Board. In addition, time should be allotted for the PRT to review issues and prepare recommendations for the Board.

Membership - The Plan Review Team shall be composed of approximately of six persons. The PRT members should have expertise in the lobster fishery and be willing to participate. Board members should solicit volunteers from among their staff to nominate to the PRT. The PRT members must be willing and able to commit the time and energy required.

The Technical Committee Chair or other willing Technical Committee representative, shall serve on the Plan review Team.

Leadership - The FMP Coordinator shall serve as the Chair of the Plan Review Team.